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Bibliography on Atomic Transition Probabilities

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Bibliography on Atomic Transition Probabilities¹

B. M. Glennon and W. L. Wiese

A revised and updated bibliography on atomic transition probabilities is presented. The papers are arranged according to elements and stages of ionization, and the method employed and class of transitions are indicated behind each reference. Only articles on discrete transitions, both permitted and forbidden, are listed. Also included is a supplementary list of important papers dealing with transition probabilities from a general point of view, and a table of comprehensive papers not included in the element list.

Key Words: Atomic, discrete, forbidden, permitted, transition probability

1. Introduction

Since the publication of our first "Bibliography on Atomic Transition Probabilities" in June 1962 (NBS Monograph 50) the number of articles containing numerical data on these quantities has increased by about 50 percent, from 600 listed in the first edition to more than 900 included in this updated bibliography. In view of this large increase we have decided to present a revised bibliography arranged in the same way as the first rather than to issue any further separate addenda. The new bibliography includes all papers received before January 1966.

1.1. Background and Scope of this Collection

In June 1960, a data center on atomic transition probabilities was established in the Atomic Physics Division of the National Bureau of Standards. The objectives of the center are to collect and catalog all relevant literature, to extract and analyze the numerical data, and to prepare and publish bibliographies and tables of "best" values.

The collection of literature on transition probabilities was started by utilizing some recent survey articles. Branching out from these, all references and footnotes in the literature were scanned. Simultaneously, several abstracting journals were searched backwards through the year 1950 so that a complete overlap with the available compilations was insured. Two card files ordered to authors and elements were established, and reprints of the articles were collected and cataloged. This data collection is continuously updated by monitoring the current literature, including several abstracting journals.

A large percentage of the articles is in languages other than English. On the initiative of the data center, translations have been made whenever the language skills of the data center group did not suffice for a critical evaluation. The most significant outgrowth of this activity are two books

which contain essentially all the Russian work up to 1962 that has not been translated elsewhere. These collections are:

1. "Optical Transition Probabilities" 1924-1960 (National Science Foundation, Washington, D.C., and Department of Commerce, by the Israel Program for Scientific Translations, Jerusalem, 1962).

2. "Optical Transition Probabilities" 1932-1962 (National Science Foundation, Washington, D.C., and Department of Commerce, by the Israel Program for Scientific Translations, Jerusalem, 1963).

As in the first edition, emphasis of this bibliography was laid on a complete presentation of the literature without regard to the quality of the article or to the application. Therefore, all of the early work was included. In many instances this is superseded by more refined determinations, but in cases where nothing else is available this older material may still be very valuable for applications where a rough estimate will do. However, it should be noted, that abstracts of talks are not quoted if the same results appear also in a more widely circulated journal article.

The bibliography is restricted to atomic and ionic transition probabilities of discrete transitions, including permitted (electric dipole) as well as forbidden (magnetic dipole, electric quadrupole) lines.

1.2. Availability of Atomic Transition Probabilities

From this compilation it may be seen that for a few of the 92 natural elements no material is available. For many other elements data exist only for the neutral atom and the first stage of ionization. Furthermore, the number of transitions treated is often quite small, and sometimes only the transition probabilities for the resonance line or for forbidden lines are available.

Fortunately, the available literature is supplemented by a few general treatments. These comprehensive articles are not included in the element list in order to keep the size of this compilation compact. Instead, they are referenced in table 1,

¹This research is a part of project DEFENDER, sponsored by the Advanced Research Projects Agency, Department of Defense, through the Office of Naval Research.

and arranged according to various elements and stages of ionization.

Because of their importance brief reviews of these general approaches are given below:

a. The Coulomb Approximation by D. R. Bates and A. Damgaard

Bates and Damgaard (Phil. Trans. Roy. Soc. London, Ser. A, **242**, 101, 1949) have shown that the main contribution to the transition integral comes from a region in which the departure of the potential of an atom or ion from its asymptotic form is so small that it may be replaced by the latter. This enables them to derive a general analytical expression for the transition integral and to compile tables (for *s-p*, *p-d*, *d-f* transitions). From these the transition probabilities for any atom or ion can immediately be calculated, provided that the lower and upper energy levels of the transitions are known (for certain other restrictions see their article). Comparison of this method with other theoretical and experimental results shows that for simple atoms, i.e., those with one electron outside closed shells, the agreement is very good (with deviations usually smaller than 10 percent). Also, for many of the somewhat more complex atomic systems, especially in lighter elements, fair agreement is obtained, often within 25 percent.

Following the development of the Coulomb approximation, a number of publications, especially in the astrophysical literature, contained numerical evaluations of a few transition probabilities using this method. Of these, only a few articles that contain larger amounts of calculated values (more than 10 lines per stage of ionization) are included in this compilation. In addition, the material from a comprehensive tabulation of Coulomb oscillator strengths in "Plasma Spectroscopy," by H. R. Griem, (McGraw-Hill Book Co., New York, 1964) is referenced in table 1, column 4.

b. The Screening Approximation by D. Layzer and C. M. Varsavsky

This theoretical approach was recently developed by D. Layzer (Ann. Phys. **8**, 271, 1959) and applied to a large number of transitions by C. M. Varsavsky (Thesis, Harvard, 1958; and Astrophys. J. Suppl. Ser. **6**, No. 53, 75-108, 1961); and A. M. Naqvi and G. A. Victor (Technical Documentary Report No. RTD TDR-63-3118 (1964), obtainable through the Defense Documentation Center, Cameron Station, Alexandria, Virginia). The method makes use of wave functions expanded explicitly in powers of the nuclear charge; consequently it is especially suitable for the simultaneous treatment of all elements in an isoelectronic sequence. In its simplest form, the approximation is based on screened hydrogenic functions. The results do not always agree well with values obtained from other methods; however, further refinements of the theory are in progress. All elements treated

in Varsavsky's second, more comprehensive paper (1961) and in Naqvi and Victor's report are listed in columns 5 and 6 of table 1. In the former article all transition probabilities are for lines in the vacuum ultraviolet.

c. "Experimental Transition Probabilities for Spectral Lines of Seventy Elements" by C. H. Corliss and W. R. Bozman (National Bureau of Standards Monograph 53, 1962.)

In 1961 Meggers, Corliss, and Scribner published tables of spectral line intensities for 39,000 lines of 70 elements in the wavelength range from 2000-9000 Å.² They determined the intensities photographically from the spectra emitted by a free-burning d-c arc with copper electrodes, into which 0.1 atomic percent of each element was mixed. In this way approximately uniform conditions for all elements were obtained. The temperature of the arc was determined by comparing the measured intensities with known relative *f*-values. This could be done for 20 different elements and good agreement was obtained, indicating the general consistency of the data. The derived *f*-values have been published in the NBS Monograph 53, "Experimental Transition Probabilities for Spectral Lines of Seventy Elements," by C. H. Corliss and W. R. Bozman. Later Allen and Corliss (Monthly Notices Roy. Astron. Soc. **126**, 37 (1963)) recommended, on the basis of a comparison with *f*-sum rules, that the absolute scale should be corrected by a factor of 0.89. A number of comparisons with other available data have shown that for the elements of the iron group generally good agreement is obtained, while large discrepancies, up to factors of 10, have been found for the alkalis and alkaline earths and the lighter elements. Thus some caution in the application of these data is advisable, in particular for the element groups mentioned last. The availability of the material is indicated in table 1, column 7.

d. An Expansion Method by R. J. S. Crossley and A. Dalgarno

Using an expansion in inverse powers of the nuclear charge *Z*, R. J. S. Crossley and A. Dalgarno (Proc. Roy. Soc. London **A286**, 510, 1965) have calculated parameters for obtaining dipole line strengths for the sodium and magnesium sequences. Their values should supersede Varsavsky's screening approximation values since Crossley & Dalgarno have taken into account the mixing of degenerate configurations. However, the individual ions of the sodium and magnesium sequences have not been listed in table 1, column 8 because for many of the higher ions wavelengths and energy levels are not available as yet.

² "Tables of Spectral Line Intensities," by W. F. Meggers, C. H. Corliss and B. F. Scribner, National Bureau of Standards Monograph 32, October 1961.

e. Four Comprehensive Papers on Forbidden Lines

Among the many papers on calculations of f -values for forbidden lines are four that treat a large number of atoms and ions in which certain configurations occur. They are listed in table 1, column 9 (A. M. Naqvi, Thesis Harvard, 1951), column 10 (S. Pasternack, *Astrophys. J.* **92**, 129, 1940) and column 11 (R. H. Garstang, *J. Research Nat. Bur. Standards* **68A**, 61, 1964), and column 12 (J. M. Malville and R. A. Berger, *Planetary and Space Science* **13**, 1131, 1965).

1.3. Arrangement of the Bibliography

The bibliography is divided into two parts. The first part (sec. 3.1) contains important papers which deal with the subject of atomic transition probabilities from a general point of view. The articles are arranged according to the following subjects:

- A. Tables of numerical values
- B. Previous literature compilations
- C. Review articles
- D. Fundamental relationships and basic concepts
- E. Detailed descriptions of experimental or theoretical methods
- F. General comments
- G. Environmental influences on transition probabilities.

Short explanatory remarks are given whenever it was felt necessary. In the second part all literature containing numerical values on the individual elements is compiled except the comprehensive articles listed in table 1. It is arranged according to elements, these being listed in alphabetical order by their chemical symbol. Within the elements, the degrees of ionization serve as subdivisions, and the papers are listed in chronological order. Thus, for looking up f -value literature one should preferably start from the end of the list and work backward when the more recent work is exhausted. One should also check material available from the comprehensive papers listed in table 1.

For the abbreviations of the journals the designations in the "List of Periodicals" of Chemical Abstracts (1956 and Supplements) have been adopted and should be consulted when in doubt. For convenience, a list of abbreviations for the lesser known journals encountered here is attached

at the end of this collection. Particular attention should be given to the apparent differences in the designation of some Russian journals. For instance, articles from the "Zhurnal Eksperimental'noi i Teoreticheskoi Fiziki" available only in the Russian language are listed as "Zhur. Eksptl. i Teoret. Fiz." If they have been or are being translated privately for the data center, the word "translated" is added in parentheses (transl.). Russian articles translated in the above mentioned books "Optical Transition Probabilities" are marked O.T.P. 1 or O.T.P. 2. When Russian literature has been translated by the American Institute of Physics and other institutions, the translated versions are quoted. For this example the abbreviation is "Soviet Phys.—JETP".

Under the column "classification" each article is characterized by one or more code words which indicate the method being used and the class of transitions being investigated, i.e., permitted-electric dipole-lines (nothing added) or forbidden-electric quadrupole, magnetic dipole-lines ("forb.") added. The word relative ("rel.") appears in all cases where only relative transition probabilities are given. Explanations for the code words are given in table 2.

1.4. Future Plans

Our intention is to publish additions or revised editions of this bibliography whenever significant amounts of new literature are accumulated. The ultimate goal of the data center is the publication of critical tables containing "best" numerical values of transition probabilities. Work on this project is in progress, and the material on the lightest 10 elements has been evaluated and is available in "NSRDS-Natl. Bur. Stds. 4, Vol. I (1966)." However, the preparation of numerical data for all elements must be considered as a long-range program because of the enormous amount of work involved. It is our hope that in the meantime the present bibliography may be of assistance to all interested scientists.

We express our thanks to Mrs. Gloria Rotter, who has typed and helped arrange all the references appearing in the bibliography.

1.5 Table 1. Contents of comprehensive papers (not included in the element list)

Element	Sym- bol	Z	Stages of Ionization 1								Malville & Berger 10 (Forbidden lines)
			Griem 2 (Coulomb approxima- tion)	Varsavsky 3 (Vacuum u.v. lines)	Naqvi & Victor 4	Corliss & Bozman 5	Crossley & Daigarno 6	Naqvi 7 (Forbidden lines)	Pasternack 8 (Forbidden lines)	Garstang 9 (Forbidden lines)	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Hydrogen.....	H	1									
Helium.....	He	2									
Lithium.....	Li	3	I, II	I, II	I, II	I(7)*					
Beryllium.....	Be	4	I, II	I, II	I, II	I(17), II(2)					
Boron.....	B	5	I, II	I, II	I, II	I(4)					
Carbon.....	C	6	I, II	I, II	I, II	I(1)					
Nitrogen.....	N	7	I, II	I, II	I, II						
Oxygen.....	O	8	I, II	I, II	I, II						
Fluorine.....	F	9	I, II	I, II	I, II						
Neon.....	Ne	10	I, II	I, II	I, II						
Sodium.....	Na	11	I, II	I, II	I, II						
Magnesium.....	Mg	12	I, II	I, II	I, II						
Aluminum.....	Al	13	I, II	I, II	I, II						
Silicon.....	Si	14	I, II	I, II	I, II						
Phosphorus.....	P	15	I, II	I, II	I, II						
Sulfur.....	S	16	I, II	I, II	I, II						
Chlorine.....	Cl	17	I, II	I, II	I, II						
Argon.....	Ar	18	I, II	I, II	I, II						
Potassium.....	K	19	I, II	I, II	I, II						
Calcium.....	Ca	20	I, II	I, II	I, II						
Scandium.....	Sc	21	I, II	I, II	I, II						
Titanium.....	Ti	22	I, II	I, II	I, II						
Vanadium.....	V	23	I, II	I, II	I, II						
Chromium.....	Cr	24	I, II	I, II	I, II						
Manganese.....	Mn	25	I, II	I, II	I, II						
Iron.....	Fe	26	I, II	I, II	I, II						
Cobalt.....	Co	27	I, II	I, II	I, II						
Nickel.....	Ni	28	I, II	I, II	I, II						
Copper.....	Cu	29	I, II	I, II	I, II						
Zinc.....	Zn	30	I, II	I, II	I, II						
Gallium.....	Ga	31	I, II	I, II	I, II						
Germanium.....	Ge	32	I, II	I, II	I, II						
Arsenic.....	As	33	I, II	I, II	I, II						
Selenium.....	Se	34	I, II	I, II	I, II						
Bromine.....	Br	35	I, II	I, II	I, II						
Krypton.....	Kr	36	I, II	I, II	I, II						
Rubidium.....	Rb	37	I, II	I, II	I, II						
Strontium.....	Sr	38	I, II	I, II	I, II						
Yttrium.....	Y	39	I, II	I, II	I, II						
Zirconium.....	Zr	40	I, II	I, II	I, II						
Niobium.....	Nb	41	I, II	I, II	I, II						
Molybdenum.....	Mo	42	I, II	I, II	I, II						
Technetium.....	Tc	43	I, II	I, II	I, II						
Ruthenium.....	Ru	44	I, II	I, II	I, II						
Rhodium.....	Rh	45	I, II	I, II	I, II						

All ions of Na and Mg sequences

⁶ Crossley, R. J. S. and Dalgarno, A., *Proc. Roy. Soc. London A* **286**, 510 (1965).
⁷ Naqvi, A. M., Thesis Harvard (1951).
⁸ Paternacki, S., *Astrophys. J.* **92**, 129 (1940); *Publ. Astron. Soc. Pacific* **51**, 160 (1938).
⁹ This is superseded by the former.)
¹⁰ Garstang, R. H., *J. Research NBS* **68A**, 61 (1964).
¹¹ Malville, J. M. and Berger, R. A., *Planetary and Space Science* **13**, 1131 (1965).
¹² The Arabic number indicates the number of lines measured.

1.6. Classification of Articles

Except where "rel." (relative) appears, all determinations in the papers listed give absolute values.

A. Theoretical methods:

1. SCF—self-consistent field calculations
2. CA—Coulomb approximation
3. Quant.—other quantum mechanical calculations
4. Quant. forb.—quantum mechanical calculations for forbidden lines
5. Estim.—estimations from sum rules, etc.

B. Experimental methods:

1. Canal—canal ray experiments
2. Emiss.—measurement in emission (arc, furnace, discharge tube, etc.)

3. Absorpt.—measurement in absorption (King furnace, absorption tube, etc.)

4. Life—direct lifetime measurements

5. Hook—anomalous dispersion measurements

6. Misc.—miscellaneous experimental methods (magneto-rotation, polarization, magnetic resonance, astrophysical measurements, Hanle-effect, etc.)

C. Miscellaneous:

1. Comm.—comments, additions, or corrections to other articles, methods, etc.

2. Incompl.—article not yet classified (because translation is needed, incomplete information available, etc.)

3. Compil.—compilations

2. Conversion Factors

The numerical factors relating the quantities A_{ki} , f_{ik} , and S are given in table 2, where:

A_{ki} is the transition probability for spontaneous emission (sec^{-1}).

f_{ik} is the absorption oscillator strength (dimensionless).

S is the line strength in atomic units, which are:

for electric dipole transitions (allowed—denoted by E_d):

$$a_0^2 e^2 = 6.459_6 \times 10^{-36} \text{ cm}^2 \text{ esu}^2;$$

for electric quadrupole transitions (forbidden—denoted by E_q):

$$a_0^4 e^2 = 1.808_8 \times 10^{-52} \text{ cm}^4 \text{ esu}^2;$$

for magnetic dipole transitions (forbidden—denoted by M_d):

$$e^2 \hbar^2 / 16 \pi^2 m_e^2 c^2 = 8.599 \times 10^{-41} \text{ erg}^2 \text{ gauss}^{-2}.$$

The wavelength λ is given in Angstrom units.
 g is the statistical weight.

The factor in each square converts by multiplication the quantity above it into the one at its left. The upper energy level of a transition is denoted by the subscript k , the lower by i . The initial state is written first, i.e., i first means absorption.

Besides the quantities introduced above, the following are also in use and are related to them by:

1. Transition probability of absorption B_{ik}

$$B_{ik} = 6.01 \lambda^3 \frac{g_k}{g_i} A_{ki};$$

2. Transition probability of induced emission B_{ki}

$$B_{ki} = 6.01 \lambda^3 A_{ki};$$

3. Emission oscillator strength f_{ki}

$$f_{ki} = -\frac{g_i}{g_k} f_{ik}.$$

Finally, it should be noted that the line strength S is symmetrical:

$$S = S_{ik} = S_{ki}.$$

Table 2. Conversion factors

	A_{ki}	f_{ik}	S
A_{ki}	1	$\frac{6.669_8 \times 10^{15}}{\lambda^2} \frac{g_i}{g_k}$	$E_d \frac{2.026_9 \times 10^{18}}{g_k \lambda^3}$
			$E_q \frac{1.679_7 \times 10^{18}}{g_k \lambda^5}$
			$M_d \frac{2.697_1 \times 10^{13}}{g_k \lambda^3}$
f_{ik}	$1.4993 \times 10^{-16} \lambda^2 \frac{g_k}{g_i}$	1	$E_d \frac{303.7_6}{g_i \lambda}$
			$E_q \frac{251.8}{g_i \lambda^3}$
			$M_d \frac{4.043_7 \times 10^{-3}}{g_i \lambda}$
S	$E_d \frac{4.935_8 \times 10^{-19}}{g_k \lambda^3}$	$E_d \frac{3.292_1 \times 10^{-3}}{g_i \lambda}$	1
	$E_q \frac{5.953 \times 10^{-19}}{g_k \lambda^5}$	$E_q \frac{3.971 \times 10^{-3}}{g_i \lambda^3}$	
	$M_d \frac{3.707_7 \times 10^{-14}}{g_k \lambda^3}$	$M_d \frac{247.3_{eg}}{\lambda}$	

Since hydrogen-like ions (with one electron and nuclear charge Z) have intensity quantities which are simply related to hydrogen, papers dealing with these ions are not included in the bibliography. For convenience, the relations are given below:

$$f_Z = f_H \quad S_Z = Z^{-2} S_H \quad A_Z = Z^4 A_H.$$

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BENNETT, JR., W. R., KINDLMANN, P. J. & MERCER, G. N.	APPLIED OPTICS SUPPLEMENT 2 OF CHEMICAL LASERS 34-57 (1965).	LIFE

HORRIGAN, F. A., KOOZEKANANI, S. H. & PAANANEN, R. A	APPLIED PHYSICS LETTERS <u>6</u> , 41-43 (1965).	LIFE
KARSTENSEN, F.	Z. PHYSIK <u>167</u> , 165-179 (1965).	LIFE
POPENOE, C. H. & SHUMAKER, JR., J. B.	NAT. BUR. STANDARDS J. RESEARCH <u>69A</u> , 495-509 (1965).	EMISS.
RICHTER, J.	Z. ASTROPHYS. <u>61</u> , 57-66 (1965).	EMISS.
STATZ, H., HORRIGAN, F. A., KOOZEKANANI, S. H., TANG, C. L. AND KOSTER, G. F.	J. APP. PHYSICS <u>36</u> , 2278-2286 (1965).	QUANT.

AR III

OSTERBROCK, D. E.	ASTROPHYS. J. <u>114</u> , 469-472 (1951).	QUANT. FORB.
CZYK, S. J. & KRUEGER, T. K.	MONTHLY NOTICES ROY. ASTRON. SOC. <u>126</u> , 177-194 (1963).	QUANT. FORB.

AR IV

NAQVI, A. M. & TALWAR, S. P.	MONTHLY NOTICES ROY. ASTRON. SOC. <u>117</u> , 463-471 (1957).	QUANT. FORB.
CZYK, S. J. & KRUEGER, T. K.	MONTHLY NOTICES ROY. ASTRON. SOC. <u>126</u> , 177-194 (1963).	QUANT. FORB.
CZYK, S. J.	PUBL. ASTRON. SOC. PACIFIC <u>76</u> , 413-429 (1964).	QUANT. FORB.

AR V

CZYK, S. J. & KRUEGER, T. K.	MONTHLY NOTICES ROY. ASTRON. SOC. <u>126</u> , 177-194 (1963).	QUANT. FORB.
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AR VI

NIKITIN, A. A. & YAKUBOVSKII, O. A.	SOVIET PHYS.-DOKLADY <u>9</u> , 409-411 (1964).	QUANT. FORB.
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AR X

EDLÉN, B.	Z. ASTROPHYS. <u>22</u> , 30-64 (1942).	QUANT. FORB.
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AR XI

OSTERBROCK, D. E.	ASTROPHYS. J. <u>114</u> , 469-472 (1951).	QUANT. FORB.
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AR XIV

EDLÉN, B.	Z. ASTROPHYS. <u>22</u> , 30-64 (1942).	QUANT. FORB.
NIKITIN, A. A. & YAKUBOVSKII, O. A.	SOVIET PHYS.-DOKLADY <u>2</u> , 409-411 (1964).	QUANT. FORB.

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AU (GOLD)*

AU I

ADDINK, N. W. H.	SPECTROCHIM. ACTA <u>15</u> , 349-359 (1959).	EMISS.
PENKIN, N. P. & SLAVENAS, I. YU. YU.	OPTICS AND SPECTROSCOPY (U.S.S.R.) <u>15</u> , 3-5 (1963).	HOOK
LAWRENCE, G. M., LINK, J. K. & KING, R. B.	ASTROPHYS. J. <u>141</u> , 293-307 (1965).	ABSORPT.

* * * * *

B (BORON)*

B I

BOLOTIN, A. B. & YUTSIS, A. P.	ZHUR. EKSPTL. I TEORET. FIZ. <u>24</u> , 537-543 (1953) (O.T.P. 1).	QUANT.
TSIUNAITIS, G. K. & YUTSIS, A. P.	SOVIET PHYS. - JETP <u>1</u> , 358-363 (1955).	SCF
NIKITIN, A. A. & YAKUBOVSKII, O. A.	SOVIET PHYS.-DOKLADY <u>2</u> , 409-411 (1964).	QUANT. FORB.
LAWRENCE, G. M. & SAVAGE, B. D.	PHYS. REV. <u>141</u> , 67-70 (1966).	LIFE

B II

VESELOV, M. G.	ZHUR. EKSPTL. I TEORET. FIZ. <u>19</u> , 959-964 (1949) (ATS TRANSL.).	QUANT.
BOLOTIN, A. B. & YUTSIS, A. P.	ZHUR. EKSPTL. I TEORET. FIZ. <u>24</u> , 537-543 (1953) (O.T.P. 1).	QUANT.
VESELOV, M. G.	VESTNIK Leningrad Univ. SER. FIZ. I KHIM. No. 8, 181-185 (1953) (O.T.P. 1).	QUANT.

*SEE ALSO TABLE 1.

AUTHOR	JOURNAL	CLASSIFICATION
VARSAVSKY, C. M.	THESIS HARVARD (1958).	QUANT.
YUTSIS, A. P., VIZBARAITE, I. A. I. & ERINGIS, K. K.	TRUDY AKADEMII NAUK LITOVSKOI S.S.R. SERIJA B 3 (26) 99-105 (1961) (O.T.P. 2).	QUANT.
LAWRENCE, G. M. & SAVAGE, B. D.	PHYS. REV. <u>141</u> , 67-70 (1966).	LIFE

B III

VESELOV, M. G.	ZHUR. EKSPITL. I TEORET. FIZ. <u>12</u> , 959-964 (1949) (ATS TRANSL.).	QUANT.
KANTSERIAVICHUS, A.	LITOVSKII FIZICHESKII SBORNIK <u>2</u> , 245-257 (1962).	QUANT.
COHEN, M. & DALGARNO, A.	PROC. ROY. SOC. LONDON A <u>275</u> , 492-503 (1963).	QUANT.
FLANNERY, M. R. & STEWART, A. L.	MONTHLY NOTICES ROY. ASTRON. SOC. <u>126</u> , 387-392 (1963).	QUANT.
WEISS, A. W.	ASTROPHYS. J. <u>138</u> , 1262-1276 (1963).	SCF

B IV

VESELOV, M. G.	ZHUR. EKSPITL. I TEORET. FIZ. <u>12</u> , 959-964 (1949) (ATS TRANSL.).	QUANT.
VESELOV, M. G.	VESTNIK LENINGRAD UNIV. SER. FIZ. I KHIM. No. 8, 181-185 (1953) (O.T.P. 1).	QUANT.
KANTSERIAVICHUS, A.	LITOVSKII FIZICHESKII SBORNIK <u>2</u> , 245-257 (1962).	QUANT.

* * * * *

BA (BARIUM)*

BA I

PROKOF'EV, V. K.	Z. PHYSIK <u>50</u> , 701-715 (1928).	HOOK, REL.
PROKOF'EV, V. K.	ZHUR. EKSPITL. I TEORET. FIZ. <u>1</u> , 111-122 (1931) (O.T.P. 1).	HOOK, REL.
CHAMALAUN, F. J.	THESIS UTRECHT (1934).	EMISS., REL. & QUANT., REL.
KING, G. W. & VAN VLECK, J. H.	PHYS. REV. <u>56</u> , 464-465 (1939).	QUANT. FORB., REL.
ROZHDESTVENSKII, D. S.	J. PHYS. (U.S.S.R.) <u>5</u> , 319-337 (1941).	HOOK, REL.
PENKIN, N. P.		& COMM.

*SEE ALSO TABLE 1.

ROZHOESTVENSKII, D. S.	IZVEST. AKAO. NAUK S.S.S.R. SER. FIZ. <u>5</u> , 97-101 (1941) (O.T.P. 1).	HOOK, REL.
PENKIN, N. P.	THESIS UTRECHT (1943).	EMISS. REL.
KRUIHDF, A. M.	PHYSICA <u>10</u> , 493-501 (1943).	EMISS., REL.
KRUIHOF, A. M.	PHYSICA <u>11</u> , 129-143 (1944) (TRANSL.).	ESTIM.
KRUIHOF, A. M. & SMIT, J. A.	IZVEST. AKAO. NAUK S.S.S.R. SER. FIZ. <u>11</u> , 217-220 (1947) (O.T.P. 1).	HOOK, REL.
PENKIN, N. P.	Z. PHYSIK <u>126</u> , 440-449 (1949).	ABSORPT.
WESSEL, G.	BULL. ACAD. SCI. U.S.S.R. PHYS. SER. <u>22</u> , 720-724 (1958).	HOOK
OSTROVSKII, YU. I., PENKIN, N. P. & SHABANOVA, L. N.	SOVIET PHYS.-DOKLADY <u>3</u> , 538-540 (1958).	HOOK
OSTROVSKII, YU. I., PENKIN, N. P. & SHABANOVA, L. N.	SPECTROCHIM. ACTA <u>15</u> , 349-359 (1959).	EMISS.
ADDINK, N. W. H.	OPTICS AND SPECTROSCOPY (U.S.S.R.) <u>2</u> , 371-373 (1960).	HOOK, REL.
OSTROVSKII, YU. I. & PENKIN, N. P.	ANN. PHYSIK <u>2</u> , 225-232 (1961).	MISC.
BUCKA, H. & SCHUSSLER, H. J.	ANN. PHYSIK <u>8</u> , 329-332 (1961).	MISC.
BUCKA, H. & NAGEL, H. H.	OPTICS AND SPECTROSCOPY (U.S.S.R.) <u>11</u> , 307-309 (1961).	HOOK & COMM.
OSTROVSKII, YU. I. & PENKIN, N. P.	Z. PHYSIK <u>168</u> , 227-238 (1962).	EMISS.
EICKE, H. F.	FIZ. PROBL. SPEKTROSKOPII, AKAO. NAUK S.S.S.R., MATERIALY 13-GO (TRINAOTSATOGO) SOVESHCH., LENINGRAO 41-43 (1962) (TRANSL.).	CA & EMISS., REL.
KOLESNIKOV, V. N. & SLEPCHENKO, N. S.	FIZ. PROBL. SPEKTRDSKOPII, AKAO. NAUK S.S.S.R., MATERIALY 13-GO (TRINAOTSATAGO) SOVESHCH., LENINGRAD 43-45 (1962).	INCOMPL.
LEBEOVA, V. V.	OPTICS AND SPECTROSCOPY (U.S.S.R.) <u>12</u> , 1-5 (1962).	HOOK
PENKIN, N. P. & SHABANOVA, L. N.	OPTICS AND SPECTROSCOPY (U.S.S.R.) <u>12</u> , 254-257 (1962).	QUANT., REL.
VAINSHTEIN, L. A. & POLUEKTOV, I. A.	THESIS CALIFORNIA INSTITUTE OF TECHNOLOGY (1963).	QUANT.
HELLIWELL, T. M.	PHYS. REV. <u>135</u> , A325-A331 (1964).	QUANT.
HELLIWELL, T. M.	Z. PHYSIK <u>172</u> , 257-268 (1964).	LIFE
HULPKE, E., PAUL, E. & PAUL, W.	PHYS. REV. <u>136</u> , A376-A379 (1964).	MISC.
LURIO, A.	OPTICS AND SPECTROSCOPY (U.S.S.R.) <u>18</u> , 535-537 (1965).	COMM.
PENKIN, N. P. & SHABANOVA, L. N.		

BA II

KERSCHBAUM, H.	ANN. PHYSIK <u>83</u> , 287-295 (1927).	CANAL
MASON, R. C.	PHYSICA <u>5</u> , 777-783 (1938).	EMISS., REL.
ROZHDESTVENSKII, D. S. & PENKIN, N. P.	J. PHYS. (U.S.S.R.) <u>5</u> , 319-337 (1941).	HOOK, REL. & COMM.

KRUTHOF, A. M.	THESIS UTRECHT (1943).	EMISS. REL.
KRUTHOF, A. M.	PHYSICA <u>10</u> , 493-501 (1943).	EMISS., REL.
KRUTHOF, A. M. & SMIT, J. A.	PHYSICA <u>11</u> , 129-143 (1944) (TRANSL.).	ESTIM.
REINDL, H. P.	THESIS UTRECHT (1946).	EMISS.
NIKONOVA, E. I. & PROKOF'EV, V. K.	OPTIKA I SPEKTROKOPIYA <u>1</u> , 290-297 (1956) (TRANSL.).	HOOK, REL.
BOYARCHUK, M. E. & BOYARCHUK, A. A.	AKADEMIIA NAUK S.S.S.R. KRYMSKAIA ASTROFIZICHESKAIA OBSERVATORIIA. IZVESTIIA <u>22</u> , 234-256 (1960) (O.T.P. 1).	COMM.
BELOUSOVA, I. M. & GUREVICH, D. B.	OPTICS AND SPECTROSCOPY (U.S.S.R.) <u>10</u> , 206-207 (1961).	COMM.
OSTROVSKII, YU. I. & PENKIN, N. P.	OPTICS AND SPECTROSCOPY (U.S.S.R.) <u>10</u> , 3-6 (1961).	HOOK
OSTROVSKII, YU. I. & PENKIN, N. P.	OPTICS AND SPECTROSCOPY (U.S.S.R.) <u>11</u> , 307-309 (1961).	COMM.
KOLESNIKOV, V. N. & SLEPCHENKO, N. S.	FIZ. PROBL. SPEKTROSKOPII, AKAD. NAUK S.S.S.R., MATERIALY 13-GO (TRINADTSATOGO) SOVESHCH., LENINGRAD 41-43 (1962) (TRANSL.).	CA & EMISS., REL.
ROBERTS, T. G. & HALES, W. L.	U. S. ARMY MISSILE COMMAND REDSTONE ARSENAL, ALABAMA, REPORT NO. RR-TR-62-B (1962).	CA
BIALAS-ZABAWA, A., SKULSKA, E. & WALACH, Z.	ACTA PHYS. POLON. <u>26</u> , 175-183 (1964).	QUANT., REL.
PETRINI, D.	COMP. REND. <u>260</u> , 4929-4932 (1965).	QUANT.
GARSTANG, R. H. & HILL, S. J.	PUBL. ASTRON. SOC. PACIFIC (TO BE PUBL.).	SCF, COMM., & QUANT. FORB.

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BE (BERYLLIUM)*

BE I

BATES, D. R. & DAMGAARD, A.	PHIL. TRANS. ROY. SOC. LONDON. SER. A. <u>242</u> , 101-122 (1949).	SCF
BIERMANN, L. & TREFFTZ, E.	Z. ASTROPHYS. <u>26</u> , 213-239 (1949).	SCF
VESELOV, M. G.	ZHUR. EKSPTL. I TEORET. FIZ. <u>19</u> , 959-964 (1949) (ATS TRANSL.).	QUANT.
BOLOTIN, A. B. & YUTSIS, A. P.	ZHUR. EKSPTL. I TEORET. FIZ. <u>24</u> , 537-543 (1953) (O.T.P. 1).	QUANT.
VESELOV, M. G.	VESTNIK LENINGRAD UNIV. SER. FIZ. I KHIM. NO. 8, 181-185 (1953) (O.T.P. 1).	QUANT.

*SEE ALSO TABLE 1.

AUTHOR	JOURNAL	CLASSIFICATION
GREENSTEIN, J. L. & TANDBERG-HANSEN, E.	ASTROPHYS. J. <u>119</u> , 113-119 (1954).	COMM.
VARSAVSKY, C. M.	THESIS HARVARD (1958).	QUANT.
ADDINK, N. W. H.	SPECTROCHIM. ACTA <u>15</u> , 349-359 (1959).	EMISS.
YUTSIS, A. P., VIZBARAITE, I. A. I. & ERINGIS, K. K.	TRUDY AKADEMII NAUK LITOVSKOI S.S.R. SERIJA B 3 (26) 99-105 (1961) (O.T.P. 2).	QUANT.
KACHALOV, V. P., KHOKHLOV, M. Z., KHOKHLOVA, V. L. & YAKOVLENA, A. V.	AKADEMIJA NAUK S.S.S.R. KRYMSKAJA ASTROFIZICHESKAJA OBSERVATORIIA. IZVESTIIA <u>22</u> , 44-51 (1962).	INCOMPL.
KHOKHLOV, M. Z.	AKADEMIJA NAUK S.S.S.R. KRYMSKAJA ASTROFIZICHESKAJA OBSERVATORIIA. IZVESTIIA <u>28</u> , 277-287 (1962).	ABSORPT., REL.
NAQVI, A. M.	CONFERENCE ON OPACITY, ALBUQUERQUE, N.M. APRIL 8 & 9, GEOPHYSICS CORP. OF AMERICA BEDFORD, MASS. (1963).	QUANT. & SCF
NAQVI, A. M.	J. QUANT. SPECTROSC. RADIAT. TRANSFER <u>4</u> , 597-615 (1964).	QUANT.
PFENNIG, H., STEELE, P. & TREFFTZ, E.	J. QUANT. SPECTROSC. RADIAT. TRANSFER <u>5</u> , 355-347 (1965).	SCF

BE II

VESELOV, M. G.	ZHUR. EKSPTL. I TEORET. FIZ. <u>19</u> , 959-964 (1949) (ATS transl.).	QUANT.
GREENSTEIN, J. L. & TANDBERG-HANSEN, E.	ASTROPHYS. J. <u>119</u> , 113-119 (1954).	COMM.
VARSAVSKY, C. M.	THESIS HARVARD (1958).	QUANT.
KANTSERIAVICHUS, A.	LITOVSKII FIZICHESKII SBORNIK <u>2</u> , 245-257 (1962).	QUANT.
ROBERTS, T. G. & HALES, W. L.	U. S. ARMY MISSILE COMMAND REDSTONE ARSENAL, ALABAMA, REPORT NO. RR-TR-62-8 (1962).	CA
COHEN, M. & DALGARNO, A.	PROC. ROY. SOC. LONDON A <u>275</u> , 492-503 (1963).	QUANT.
FLANNERY, M. R. & STEWART, A. L.	MONTHLY NOTICES ROY. ASTRON. SOC. <u>126</u> , 387-392 (1963).	QUANT.
KUNIN, P., TAKSAR, I., SHILTERE, M. & SHILTER, E.	IZVESTIIA AKADEMII NAUK LATIVSKOI S.S.R. #8 57-62 (1963).	QUANT.
WEISS, A. W.	ASTROPHYS. J. <u>138</u> , 1262-1276 (1963).	SCF

BE III

VESELOV, M. G.	ZHUR. EKSPTL. I TEORET. FIZ. <u>19</u> , 959-964 (1949) (ATS transl.).	QUANT.
VESELOV, M. G.	VESTNIK LENINGRAD UNIV. SER. FIZ. I KHIM. NO. 8, 181-185 (1953) (O.T.P. 1).	QUANT.

AUTHOR	JOURNAL	CLASSIFICATION
YUTSIS, A. P., USHPALIS, K. K., KAVETSKIS, V. I. & LEVINSON, I. B.	OPTIKA I SPEKTROSKOPIYA <u>1</u> , 601-605 (1956) (O.T.P. 1).	QUANT.
USHPALIS, K. K., KUZMITSKITE, L. L. & BUDRITE, S. D.	TRUDY AKADEMII NAUK LITOVSKOI S.S.R. SERIIA B <u>3</u> (15) 47-53 (1958).	QUANT.
YUTSIS, A. P., VIZBARAITE, IA. I. & ERINGIS, K. K.	TRUDY AKADEMII NAUK LITOVSKOI S.S.R. SERIIA B <u>3</u> (26) 99-105 (1961) (O.T.P. 2).	QUANT.
KANTSERIAVICHUS, A.	LITOVSKII FIZICHESKII SBORNIK <u>2</u> , 245-257 (1962).	QUANT.
* * * * *		
BI (BISMUTH)*		
BI I		
SOBOLEV, N. N.	ZHUR. EKSPTL. I TEORET. FIZ. <u>13</u> , 131-136 (1943) (O.T.P. 1).	EMISS., REL.
ALLEN, C. W.	MONTHLY NOTICES ROY. ASTRON. SOC. <u>117</u> , 622-628 (1957).	COMM.
ALLEN, C. W. & ASAAD, A. S.	MONTHLY NOTICES ROY. ASTRON. SOC. <u>117</u> , 36-49 (1957).	EMISS.
RICE, P. A. & RAGONE, D. V.	J. CHEM. PHYS. <u>42</u> , 701-708 (1965).	ABSORPT.
* * * * *		
BR (BROMINE)*		
BR II		
MARTIN, W. C. & TECH, J. L.	J. OPT. SOC. AM. <u>51</u> , 591-594 (1961).	QUANT. FORB.
* * * * *		
C (CARBON)*		
C I		
STEVENSON, A. F.	PROC. ROY. SOC. LONDON A <u>137</u> , 298-325 (1932).	QUANT. FORB.
CONDON, E. U.	ASTROPHYS. J. <u>79</u> , 217-234 (1934).	QUANT. FORB.

*SEE ALSO TABLE 1.

GARSTANG, R. H.	MONTHLY NOTICES ROY. ASTRON. SOC. <u>111</u> , 115-124 (1951).	QUANT. FORB.
YAMANOUCHI, T. & HORIE, H.	J. PHYS. SOC. JAPAN <u>2</u> , 52-56 (1952).	QUANT. FORB.
MAECKER, H.	Z. PHYSIK <u>135</u> , 13-22 (1953).	EMISS.
YILMAZ, H.	PHYS. REV. <u>100</u> , 1148-1153 (1955).	QUANT. FORB.
BOLOTIN, A. B., LEVINSON, I. B. & LEVIN, L. I.	SOVIET PHYS. - JETP <u>2</u> , 391-395 (1956).	QUANT.
RICHTER, J.	Z. PHYSIK <u>151</u> , 114-123 (1958).	EMISS.
VARSAVSKY, C. M.	THESIS HARVARD (1958).	QUANT.
YUTSIS, A. P. & VIZBARAITE, I. A. I.	TRUDY AKADEMII NAUK LITOVSKOI S.S.R., SERIJA B, 1 (17) 3-15 (1959).	QUANT. FORB.
GOLOBERG, L., MÜLLER, E. A. & ALLER, L. H.	ASTROPHYS. J. SUPPL. SER. <u>5</u> , #45, 1-137 (1960).	CA
DOHERTY, L. R.	THESIS MICHIGAN (1961).	EMISS.
KHOKHLOV, M. Z.	AKADEMIIA NAUK S.S.S.R. KRYMSKAIA ASTROFIZICHESKAIA OBSERVATORIIA. IZVESTIIA <u>26</u> , 52-62 (1961).	QUANT.
YUTSIS, A. P. & VIZBARAITE, I. A. I. & ERINGIS, K. K.	TRUDY AKADEMII NAUK LITOVSKOI S.S.R., SERIJA B, 3 (26) 99-105 (1961) (O.T.P. 2).	QUANT. FORB.
FOSTER, E. W.	PROC. PHYS. SOC. LONDON A <u>79</u> , 94-104 (1962).	EMISS.
FOSTER, E. W.	PROC. PHYS. SOC. LONDON A <u>80</u> , 882-893 (1962).	EMISS.
GARSTANG, R. H.	THE OBSERVATORY <u>82</u> , 50-51 (1962).	QUANT.
BOLDT, G.	Z. NATURFORSCH. <u>18A</u> , 1107-1116 (1963).	EMISS.
NORMAN, G. E.	OPTICS AND SPECTROSCOPY (U.S.S.R.) <u>14</u> , 315-317 (1963).	QUANT.
LAWRENCE, G. M. & SAVAGE, B. D.	PHYS. REV. <u>141</u> , 67-70 (1966).	LIFE

C II

ALLER, L. H.	ASTROPHYS. J. <u>97</u> , 135-165 (1943).	QUANT.
BIERMANN, L. & LÜBECK, K.	Z. ASTROPHYS. <u>25</u> , 325-339 (1948).	SCF
BOLOTIN, A. B. & YUTSIS, A. P.	ZHUR. EKSPITL. I TEORET. FIZ. <u>24</u> , 537-543 (1953) (O.T.P. 1).	QUANT.
MAECKER, H.	Z. PHYSIK <u>135</u> , 13-22 (1953).	EMISS.
VARSAVSKY, C. M.	THESIS HARVARO (1958).	QUANT.
ALLER, L. H. & JUGAKU, J.	ASTROPHYS. J. SUPPL. SER. <u>4</u> , #38, 109-156 (1959).	CA
GAUSTAO, J. E. & SPITZER, JR., L.	ASTROPHYS. J. <u>134</u> , 771-776 (1961).	COMM. & ESTIM.
NIKITIN, A. A. & YAKUBOVSKII, O. A.	SOVIET ASTRONOMY-AJ <u>2</u> , 189-198 (1963).	QUANT.
NIKITIN, A. A. & YAKUBOVSKII, O. A.	SOVIET PHYS.-DOKLADY <u>2</u> , 409-411 (1964).	QUANT. FORB.
LAWRENCE, G. M. & SAVAGE, B. D.	PHYS. REV. <u>141</u> , 67-70 (1966).	LIFE

ROBERTS, J. R. & ECKERLE, K. L.	BULL. AM. PHYS. SOC. <u>11</u> , #1 (1966).	EMISS., REL.
C III		
ALLER, L. H.	ASTROPHYS. J. <u>92</u> , 135-165 (1943).	QUANT.
VESELOV, M. G.	ZHUR. EKSPTL. I TEORET. FIZ. <u>19</u> , 959-964 (1949) (ATS transl.).	QUANT.
BOLOTIN, A. B. & YUTSIS, A. P.	ZHUR. EKSPTL. I TEORET. FIZ. <u>24</u> , 537-543 (1953) (O.T.P. 1).	QUANT.
VESELOV, M. G.	VESTNIK Leningrad Univ. Ser. Fiz. i Khim. No. 8, 181-185 (1953) (O.T.P. 1).	QUANT.
GAUSTAD, J. E. & SPITZER, JR., L.	ASTROPHYS. J. <u>134</u> , 771-776 (1961).	ESTIM.
YUTSIS, A. P., VIZBARAITE, IA. I. & ERINGIS, K. K.	TRUDY AKADEMII NAUK LITOVSKOI S.S.R. SERIJA B 3 (26) 99-105 (1961) (O.T.P. 2).	QUANT.
PFENNIG, H., STEELE, P. & TREFFTZ, E.	J. QUANT. SPECTROSC. RADIAT. TRANSFER <u>5</u> , 355-347 (1965).	SCF

C IV

ALLER, L. H.	ASTROPHYS. J. <u>92</u> , 135-165 (1943).	QUANT.
VESELOV, M. G.	ZHUR. EKSPTL. I TEORET. FIZ. <u>19</u> , 959-964 (1949) (ATS transl.).	QUANT.
KANTSERIAVICHIOUS, A.	LITOVSKII FIZICHESKII SBORNIK <u>2</u> , 245-257 (1962).	QUANT.
COHEN, M. & DALGARNO, A.	PROC. ROY. SOC. LONDON A <u>275</u> , 492-503 (1963).	QUANT.
FLANNERY, M. R. & STEWART, A. L.	MONTHLY NOTICES ROY. ASTRON. SOC. <u>126</u> , 387-392 (1963).	QUANT.
WEISS, A. W.	ASTROPHYS. J. <u>138</u> , 1262-1276 (1963).	SCF
BERKNER, K. H., COOPER III, W. S., KAPLAN, S. N. & PYLE, R. V.	PHYS. LETTERS <u>16</u> , 35-36 (1965).	LIFE

C V

VESELOV, M. G.	ZHUR. EKSPTL. I TEORET. FIZ. <u>19</u> , 959-964 (1949) (ATS transl.).	QUANT.
VESELOV, M. G.	VESTNIK Leningrad Univ. Ser. Fiz. i Khim. No. 8, 181-185 (1953) (O.T.P. 1).	QUANT.
KANTSERIAVICHIOUS, A.	LITOVSKII FIZICHESKII SBORNIK <u>2</u> , 245-257 (1962).	QUANT.

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CA (CALCIUM)*

Ca I

FRERICHS, R.	Z. PHYSIK <u>31</u> , 305-310 (1925).	EMISS., REL.
KERSCHBAUM, H.	ANN. PHYSIK <u>83</u> , 287-295 (1927).	CANAL
PROKOF'EV, V. K.	Z. PHYSIK <u>50</u> , 701-715 (1928).	HOOK, REL.
MENZEL, D. H.	PUBL. LICK OBSERVATORY <u>17</u> , 232-238 (1930).	COMM. & ESTIM.
PROKOF'EV, V. K.	ZHUR. EKSPTL. I TEORET. FIZ. <u>1</u> , 111-122 (1931) (O.T.P. 1).	HOOK, REL.
FILIPPOV, A. & KREMENEVSKY, N.	PHYSIK. Z. SOWJETUNION <u>1</u> , 299-301 (1932).	HOOK, REL.
RUSSELL, H. N.	ASTROPHYS. J. <u>28</u> , 239-297 (1933).	ESTIM.
CHAMALAUN, F. J.	THESIS UTRECHT (1934).	EMISS., REL. & QUANT., REL.
STEINHÄUSER, A.	Z. PHYSIK <u>95</u> , 669-686 (1935).	MISC.
STEINHÄUSER, A.	Z. PHYSIK <u>99</u> , 300 (1936).	COMM.
KATZ, E. & ORNSTEIN, L. S.	PHYSICA <u>4</u> , 757-760 (1937).	EMISS., REL.
HARTREE, D. R. & HARTREE, W.	PROC. ROY. SOC. LONDON A <u>164</u> , 167-191 (1938).	SCF
KING, G. W. & VAN VLECK, J. H.	PHYS. REV. <u>56</u> , 464-465 (1939).	QUANT. FORB., REL.
SCHUTTEVAER, J. W.	THESIS UTRECHT (1942).	EMISS., REL.
SCHUTTEVAER, J. W., DE BONT, M. J. & VAN DEN BROEK, TH. H.	PHYSICA <u>10</u> , 544-552 (1943).	EMISS., REL.
BATES, D. R. & DAMGAARD, A.	PHIL. TRANS. ROY. SOC. LONDON. SER. A. <u>242</u> , 101-122 (1949).	SCF
TREFFTZ, E.	Z. ASTROPHYS. <u>29</u> , 287-303 (1951).	SCF
OLSEN, K. H., ROUTLY, P. M. & KING, R. B.	PROCEEDINGS OF THE NATIONAL SCIENCE FOUNDATION CONFERENCE ON STELLAR ATMOSPHERES, INDIANA UNIV., P. 46 (1954).	ABSORPT., REL.
OLSEN, K. H.	THESIS CALIFORNIA INSTITUTE OF TECHNOLOGY (1956).	ABSORPT.
ALLEN, C. W.	MONTHLY NOTICES ROY. ASTRON. SOC. <u>117</u> , 622-628 (1957).	EMISS. & CA
VAINSHTEIN, L. A.	OPTIKA I SPEKTROSKOPIYA <u>3</u> , 313-321 (1957) (TRANSL.).	QUANT.
OSTROVSKII, YU. I., PENKIN, N. P. & SHABANOVA, L. N.	BULL. ACAD. SCI. U.S.S.R. PHYS. SER. <u>22</u> , 720-724 (1958).	HOOK
OSTROVSKII, YU. I., PENKIN, N. P. & SHABANOVA, L. N.	SOVIET PHYS.-DOKLADY <u>3</u> , 538-540 (1958).	HOOK
VARSAVSKY, C. M.	THESIS HARVARD (1958).	QUANT.
ADDINK, N. W. H.	SPECTROCHIM. ACTA <u>15</u> , 349-359 (1959).	EMISS.

*SEE ALSO TABLE 1.

AUTHOR	JOURNAL	CLASSIFICATION
OLSEN, K. H., ROUTLY, P. M. & KING, R. B.	ASTROPHYS. J. <u>130</u> , 688-692 (1959).	ABSORPT.
BOYARCHUK, M. E. & BOYARCHUK, A. A.	AKADEMIIA NAUK S.S.S.R. KRYMSKAIA ASTROFIZICHESKAIA OBSERVATORIIA. IZVESTIIA <u>22</u> , 234-256 (1960) (O.T.P. 1).	COMM., REL.
DITCHBURN, R. W. & HUDSON, R. D.	PROC. ROY. SOC. LONDON A <u>256</u> , 53-61 (1960).	ABSORPT.
GOLOBERG, L., MÜLLER, E. A. & ALLER, L. H.	ASTROPHYS. J. SUPPL. SER. <u>5</u> , #45, 1-137 (1960).	CA
CHIBLIS, I. V. & USHPALIS, K. K.	TRUDY AKADEMII NAUK LITOVSKOI S.S.R. SERIIA B, 2 (25), 23-30 (1961) (O.T.P. 2).	QUANT.
OSTROVSKII, YU. I. & PENKIN, N. P.	OPTICS AND SPECTROSCOPY (U.S.S.R.) <u>10</u> , 219-222 (1961).	HOOK, REL.
OSTROVSKII, YU. I. & PENKIN, N. P.	OPTICS AND SPECTROSCOPY (U.S.S.R.) <u>11</u> , 307-309 (1961).	HOOK & COMM.
STROTSKITE, T. D. & YUTSIS, A. P.	TRUDY AKADEMII NAUK LITOVSKOI S.S.R. SERIIA B, 2 (25), 93-98 (1961) (O.T.P. 2).	QUANT.
ROBERTS, T. G. & HALES, W. L.	U. S. ARMY MISSILE COMMAND RESTONE ARSENAL, ALABAMA, REPORT No. RR-TR-62-8 (1962).	CA
VAINSHTEIN, L. A.	TRANSACTIONS OF THE P.N. LEBEDEV PHYSICS INSTITUTE <u>15</u> , PART 1, 1-50 (1962) (CBE-TR).	QUANT.
VAINSHTEIN, L. A. & POLUEKTOV, I. A.	OPTICS AND SPECTROSCOPY (U.S.S.R.) <u>12</u> , 254-257 (1962).	QUANT., REL.
VASIN, B. L., LESKOV, L. V. & SAVIN, F. A.	FIZ. PROBL. SPEKTROSKOPII, AKAO. NAUK S.S.S.R., MATERIALY 13-60 (TRINIAOTSATAGO) SOVESHCH., LENINGRAD 39-41 (1962).	LIFE
HELLIWELL, T. M.	THESIS CALIFORNIA INSTITUTE OF TECHNOLOGY (1963).	QUANT.
ODINSTOV, A. I.	OPTICS AND SPECTROSCOPY (U.S.S.R.) <u>14</u> , 172-176 (1963).	ABSORPT.
SHABANOVA, L. N.	OPTICS AND SPECTROSCOPY (U.S.S.R.) <u>15</u> , 450-451 (1963).	HOOK
HELLIWELL, T. M.	PHYS. REV. <u>135</u> , A325-A331 (1964).	QUANT.
HULPKE, E., PAUL, E. & PAUL, W.	Z. PHYSIK <u>172</u> , 257-268 (1964).	LIFE
KÖSTLIN, H.	Z. PHYSIK <u>178</u> , 200-215 (1964).	EMISS.
LURIO, A., DE ZAFRA, R. L. & GOSHEN, R. J.	PHYS. REV. <u>134</u> , A1198-A1203 (1964).	MISC.
PENKIN, N. P. & SHABANOVA, L. N.	OPTICS AND SPECTROSCOPY (U.S.S.R.) <u>18</u> , 535-537 (1965).	COMM.
STEWART, J. C. & ROTENBERG, M.	PHYS. REV. <u>140</u> , 1508A-1519A (1965).	QUANT.
CA 11		
MILNE, M. E.	MONTHLY NOTICES ROY. ASTRON. SOC. <u>84</u> , 354-363 (1924).	MISC.
ZWAAN, A.	NATURWISSENSCHAFTEN <u>17</u> , 121-122 (1928).	QUANT.

GERASIMOVIC, B. P. & STRUVE, O.	ASTROPHYS. J. <u>62</u> , 7-33 (1929).	MISC. & COMM.
ZWAAN, A.	THESIS UTRECHT (1929).	QUANT.
ZWAAN, A.	ARCH. NEERL. SCI. 3 A <u>12</u> , 1-75 (1929).	QUANT.
MENZEL, D. H.	PUBL. LICK OBSERVATORY <u>17</u> , 232-238 (1930).	COMM. & ESTIM.
RUSSELL, H. N.	ASTROPHYS. J. <u>78</u> , 239-297 (1933).	ESTIM.
HARTREE, D. R. & HARTREE, W.	PROC. ROY. SOC. LONDON A <u>164</u> , 167-191 (1938).	SCF
BATES, D. R. & DAMGAARD, A.	PHIL. TRANS. ROY. SOC. LONDON. SER. A. <u>242</u> , 101-122 (1949).	SCF
GREEN, L. C. & WEBER, N. E.	ASTROPHYS. J. <u>111</u> , 582-586 (1950).	SCF
GREEN, L. C., WEBER, N. E. & KRAWITZ, E.	ASTROPHYS. J. <u>113</u> , 690-696 (1951).	SCF
OSTERBROCK, D. E.	ASTROPHYS. J. <u>114</u> , 469-472 (1951).	QUANT. FORB.
SEATON, M. J.	PROC. ROY. SOC. LONDON A <u>208</u> , 418-430 (1951).	COMM.
GREEN, L. C., WEBER, N. E. & KRAWITZ, E.	ASTRON. J. <u>56</u> , 38 (1951-1952).	SCF & COMM.
TREFFTZ, E. & BIERMANN, L.	Z. ASTROPHYS. <u>30</u> , 275-281 (1952).	SCF
NIKITIN, A. A.	DOKLAOY AKAO. NAUK S.S.S.R. <u>98</u> , 31-33 (1954) (SLA-RT 2961) (O.T.P. 2).	ESTIM., FORB.
NIKITIN, A. A. & GOROENKO, G. V.	DOKLAOY AKAO. NAUK ARMYAN. S.S.R. <u>20</u> , 165-167 (1955) (O.T.P. 1).	QUANT.
NIKONOVA, E. I. & PROKOF'EV, V. K.	OPTIKA I SPEKTROSKOPIYA <u>1</u> , 290-297 (1956) (TRANSL.).	HOOK, REL.
BERSUKER, I. B.	SOVIET PHYS. - DOKLAOY <u>2</u> , 167-169 (1957).	SCF & ESTIM.
NIKITIN, A. A.	UCHENYE ZAPISKI LENINGRAO. GOSUOARST. UNIV. SER. MAT. NAUK <u>29</u> , No. 190, 3-17 (1957) (O.T.P. 2).	ESTIM. FORB.
DVORNIKOVA, I. U. & NAGIBINA, I. M.	OPTIKA I SPEKTROSKOPIYA <u>4</u> , 421-429 (1958) (O.T.P.2).	EMISSION, REL.
NAGIBINA, I. M.	BULL. ACAD. SCI. U.S.S.R. PHYS. SER. <u>22</u> , 678-679 (1958).	EMISSION, REL.
NAGIBINA, I. M.	OPTIKA I SPEKTROSKOPIYA <u>4</u> , 430-437 (1958) (O.T.P.2).	EMISSION, REL.
VARSIVSKY, C. M.	THESIS HARVARO (1958).	QUANT.
HOZIAUX, L. & SADOINE, M. P.	BULL. SOC. ROY. SCI. LIÉGE <u>30</u> , 287-299 (1961).	CA
KOROLEV, F. A. & KVARATSKHELI, YU. K.	OPTICS AND SPECTROSCOPY (U.S.S.R.) <u>10</u> , 200-202 (1961).	EMISSION, REL.
OSTROVSKII, YU. I. & PENKIN, N. P.	OPTICS AND SPECTROSCOPY (U.S.S.R.) <u>10</u> , 3-6 (1961).	HOOK
OSTROVSKII, YU. I. & PENKIN, N. P.	OPTICS AND SPECTROSCOPY (U.S.S.R.) <u>11</u> , 307-309 (1961).	COMM.
DOUGLAS, A. S. & GARSTANG, R. H.	PROC. CAMBRIDGE PHIL. SOC. <u>58</u> , 377-381 (1962).	SCF

AUTHOR	JOURNAL	CLASSIFICATION
KOROLEV, F. A. & KVARATSKHELI, Iu. K.	FIZ. PROBL. SPEKTROSKOPII, AKAD. NAUK S.S.S.R. MATERIALY 13-GO (TRINADTSATAGO) SOVESHCH. LENINGRAD 109-111 (1962).	EMISS., REL.
ROBERTS, T. G. & HALES, W. L.	U. S. ARMY MISSILE COMMAND REDSTONE ARSENAL, ALABAMA, REPORT NO. RR-TR-62-8 (1962).	CA
BIALAS-ZABAWA, A., SKULSKA, E. & WALACH, Z.	ACTA PHYS. POLON. <u>26</u> , 175-183 (1964).	QUANT., REL.
GALLAGHER, A. & SMITH, W. W.	BULL AM. PHYS. SOC. SERIES II, <u>10</u> , 455 (1965).	MISC.
CA VII		
OSTERBROCK, D. E.	ASTROPHYS. J. <u>114</u> , 469-472 (1951).	QUANT. FORB.
CA VIII		
NIKITIN, A. A. & YAKUBOVSKII, O. A.	SOVIET PHYS.-DOKLADY <u>9</u> , 409-411 (1964).	QUANT. FORB.
CA X		
STEWART, J. C. & ROTENBERG, M.	PHYS. REV. <u>140</u> , 1508A-1519A (1965).	QUANT.
CA XII		
EDLÉN, B.	Z. ASTROPHYS. <u>22</u> , 30-64 (1942).	QUANT. FORB.
HUANG, K.	ASTROPHYS. J. <u>101</u> , 187-195 (1945).	MISC. FORB.
CA XIII		
EDLÉN, B.	Z. ASTROPHYS. <u>22</u> , 30-64 (1942).	QUANT. FORB.
HUANG, K.	ASTROPHYS. J. <u>101</u> , 187-195 (1945).	MISC. FORB.
GARSTANG, R. H.	ASTROPHYS. J. <u>115</u> , 569-570 (1952).	QUANT. FORB.
CA XV		
EDLÉN, B.	Z. ASTROPHYS. <u>22</u> , 30-64 (1942).	QUANT. FORB.
GARSTANG, R. H.	ASTROPHYS. J. <u>115</u> , 569-570 (1952).	QUANT. FORB.
GARSTANG, R. H.	PROC. CAMBRIDGE PHIL. SOC. <u>52</u> , 107-113 (1956).	QUANT. FORB.

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Cd (CADMIUM)*

Cd I

KUHN, W.	NATURWISSENSCHAFTEN <u>14</u> , 48-49 (1926).	MISC.
KUHN, W.	KGL. DANSKE VIDENSKAB. SELSKAB MAT.-FYS. MEDD. <u>2</u> , 1-86 (1926).	MISC.
SOLEILLET, P.	COMPT. REND. <u>187</u> , 212-214 (1928).	MISC.
ELLETT, A.	PHYS. REV. <u>33</u> , 124 (1929).	MISC.
LARCHE, K.	Z. PHYSIK <u>67</u> , 440-477 (1931).	MISC., REL.
ZEMANSKY, M. W.	Z. PHYSIK <u>22</u> , 587-599 (1931).	ABSORPT.
FILIPPOV, A. N.	TRUDY GOSUDARST. OPT. INST. LENINGRAD <u>8</u> , #77, 1-8 (1932) (O.T.P. 1).	HOOK, REL.
FILIPPOV, A. N.	PHYSIK. Z. SOWJETUNION <u>1</u> , 289-296 (1932).	HOOK, REL.
KOENIG, H. D. & ELLETT, A.	PHYS. REV. <u>39</u> , 576-584 (1932).	LIFE
MITCHELL, A. C. G.	PHYS. REV. <u>43</u> , 887-893 (1933).	COMM.
SOLEILLET, P.	COMPT. REND. <u>126</u> , 1991-1993 (1933).	MISC.
ORNSTEIN, L. S., VAN HENGSTUM, J. P. A. & BRINKMAN, H.	PHYSICA <u>5</u> , 145-152 (1938).	EMISS., REL.
KING, G. W. & VAN VLECK, J. H.	PHYS. REV. <u>56</u> , 464-465 (1939).	QUANT. FORB., REL.
KING, R. B. & STOCKBARGER, D. C.	ASTROPHYS. J. <u>91</u> , 488-502 (1940).	ABSORPT.
SCHUTTEVAER, J. W., DE BONT, M. J. & VAN DEN BROEK, TH. H.	PHYSICA <u>10</u> , 544-552 (1943).	EMISS., REL.
WEBB, H. W. & MESSENGER, H. A.	PHYS. REV. <u>66</u> , 77-86 (1944).	LIFE
VAINSHTEIN, L. A. & YAVORSKII, B. M.	DOKLADY AKAD. NAUK S.S.S.R. <u>87</u> , 919-922 (1952) (O.T.P. 1).	QUANT.
MATLAND, C. G.	PHYS. REV. <u>91</u> , 436 (1953).	LIFE
VAINSHTEIN, L. A. & YAVORSKII, B. M.	ZHUR. EKSPIT. I TEORET. FIZ. <u>22</u> , 712-718 (1954) (SLA transl. RT-3363).	QUANT.
VAN HENGSTUM, J. P. A.	THESIS UTRECHT (1955).	EMISS.
VAN HENGSTUM, J. P. A. & SMIT, J. A.	PHYSICA <u>22</u> , 86-98 (1956).	EMISS.
VAINSHTEIN, L. A.	OPTIKA I SPEKTROKOPIYA <u>3</u> , 313-321 (1957) (transl.).	QUANT.
LEŚ, Z. & NIEWODNICZAŃSKI, H.	ACTA PHYS. POLON. <u>12</u> , 365-368 (1958).	EMISS., REL.
NAGIBINA, I. M.	OPTIKA I SPEKTROKOPIYA <u>4</u> , 430-437 (1958) (O.T.P.2).	EMISS., REL.
ADDINK, N. W. H.	SPECTROCHIM. ACTA <u>15</u> , 349-359 (1959).	EMISS.
GENEUX, E. & WANDERS-VINCENZ, B.	HELV. PHYS. ACTA <u>33</u> , 185-220 (1960) (transl.).	MISC.
PENKIN, N. P. & RED'KO, T. P.	OPTICS AND SPECTROSCOPY (U.S.S.R.) <u>2</u> , 360 (1960).	HOOK, REL. & EMISS., REL.

*SEE ALSO TABLE 1.

AUTHOR	JOURNAL	CLASSIFICATION
BARRAT, J. P. & BUTAUX, J.	COMPT. RENO. <u>253</u> , 2668-2670 (1961).	MISC.
LEŚ, Z. & NIEWOONICZAŃSKI, H.	ACTA PHYS. POLON. <u>20</u> , 701-714 (1961).	EMISS., REL.
GARSTANG, R. H.	J. OPT. SOC. AM. <u>52</u> , 845-851 (1962).	QUANT.
VAINSHTEIN, L. A.	TRANSACTIONS OF THE P.N. LEBEOEV PHYSICS INSTITUTE <u>15</u> , PART 1, 1-50 (1962) (CBE-TR).	QUANT.
VAINSHTEIN, L. A. & POLUEKTOV, I. A.	OPTICS AND SPECTROSCOPY (U.S.S.R.) <u>12</u> , 254-257 (1962).	QUANT., REL.
BARRAT, M. & BARRAT, J. P.	COMP. RENO. <u>252</u> , 1463-1465 (1963).	MISC.
HELLIWELL, T. M.	THESIS CALIFORNIA INSTITUTE OF TECHNOLOGY (1963).	QUANT.
BARRAT, M.	COMP. RENO. <u>259</u> , 1063-1066 (1964).	MISC.
BIEŃIEWSKI, T.	MONTHLY NOTICES ROY. ASTRON. SOC. <u>127</u> , 359-366 (1964).	ABSORPT.
BYRON, JR., F. W. McDERMOTT, M. N. & NOVICK, R.	PHYS. REV. <u>134</u> , A615-A624 (1964).	MISC.
HELLIWELL, T. M.	PHYS. REV. <u>135</u> , A325-A331 (1964).	QUANT.
LURIO, A. & NOVICK, R.	PHYS. REV. <u>134</u> , A608-A614 (1964).	MISC.
SPITZER, M.	COMP. RENO. 3907-3909 (1965).	MISC.

Co II

GENEUX, E. & WANDERS-VINCENZ, B.	HELV. PHYS. ACTA <u>33</u> , 185-220 (1960) (TRANSL.).	MISC.
GENEUX, E. & WANDERS-VINCENZ, B.	PHYS. REV. LETTERS <u>3</u> , 422-423 (1959).	MISC.
BARRAT, M. & BARRAT, J. P.	COMP. RENO. <u>252</u> , 1463-1465 (1963).	MISC.

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CL (CHLORINE)*

CL I

HEY, P.	Z. PHYSIK <u>152</u> , 79-88 (1959).	EMISS.
FOSTER, E. W.	PROC. PHYS. SOC. LONDON A <u>80</u> , 882-893 (1962).	EMISS.
BAGUS, P. S.	U. S. ATOMIC ENERGY COMMISSION ANL-6959 (1964).	SCF

CL II

OSTERBROCK, D. E.	ASTROPHYS. J. <u>114</u> , 469-472 (1951).	QUANT. FORB.
HEY, P.	Z. PHYSIK <u>152</u> , 79-88 (1959).	EMISS.
GAUSTAD, J. E. & SPITZER, JR., L.	ASTROPHYS. J. <u>134</u> , 771-776 (1961).	ESTIM.

*SEE ALSO TABLE 1.

AUTHOR	JOURNAL	CLASSIFICATION
FOSTER, E. W.	PROC. PHYS. SOC. LONDON A <u>80</u> , 882-893 (1962).	EMISS.
CZYK, S. J. & KRUEGER, T. K.	MONTHLY NOTICES ROY. ASTRON. SOC. <u>126</u> , 177-194 (1963).	QUANT. FORB.
CL III		
GAUSTAO, J. E. & SPITZER, JR., L.	ASTROPHYS. J. <u>134</u> , 771-776 (1961).	ESTIM.
CZYK, S. J. & KRUEGER, T. K.	MONTHLY NOTICES ROY. ASTRON. SOC. <u>126</u> , 177-194 (1963).	QUANT. FORB.
CL IV		
CZYK, S. J. & KRUEGER, T. K.	MONTHLY NOTICES ROY. ASTRON. SOC. <u>126</u> , 177-194 (1963).	QUANT. FORB.
CL V		
NIKITIN, A. A. & YAKUBOVSKII, O. A.	SOVIET PHYS.-DOKLADY <u>2</u> , 409-411 (1964).	QUANT. FORB.
CL VII		
STEWART, J. C. & ROTENBERG, M.	PHYS. REV. <u>140</u> , 1508A-1519A (1965).	QUANT.
CL XIII		
NIKITIN, A. A. & YAKUBOVSKII, O. A.	SOVIET PHYS.-DOKLAODY <u>2</u> , 409-411 (1964).	QUANT. FORB.
* * * * *		
Co (COBALT)*		
Co I		
BOUMA, T.	THESIS UTRECHT (1930).	EMISS., REL.
ORNSTEIN, L. S. & BOUMA, T.	PHYS. REV. <u>36</u> , 679-693 (1930).	EMISS., REL.
KING, R. G., PARNES, B. R., DAVIS, M. H. & OLSEN, K. H.	J. OPT. SOC. AM. <u>45</u> , 350-353 (1955).	ABSORPT., REL.

*SEE ALSO TABLE 1.

AUTHOR	JOURNAL	CLASSIFICATION
ALLEN, C. W. & ASAAD, A. S.	MONTHLY NOTICES ROY. ASTRON. SOC. <u>117</u> , 36-49 (1957).	EMISS.
HINNOV, E. & KOHN, H.	J. OPT. SOC. AM. <u>47</u> , 156-162 (1957).	EMISS.
OSTROVSKII, YU. I. & PENKIN, N. P.	OPTIKA I SPEKTROKOPIYA <u>5</u> , 345-353 (1958) (O.T.P.1).	HOOK, REL.
VARSAVSKY, C. M.	THESIS HARVARD (1958).	QUANT.
ADDINK, N. W. H.	SPECTROCHIM. ACTA <u>15</u> , 349-359 (1959).	EMISS.
ALLEN, C. W.	MONTHLY NOTICES ROY. ASTRON. SOC. <u>121</u> , 299-332 (1960).	COMM. & CA
MOROZOVA, N. P. & STARTSEV, G. P.	OPTICS AND SPECTROSCOPY (U.S.S.R.) <u>17</u> , 174-176 (1964).	EMISS.
LAWRENCE, G. M., LINK, J. K. & KING, R. B.	ASTROPHYS. J. <u>141</u> , 293-307 (1965).	ABSORPT.
STEWART, J. C. & ROTENBERG, M.	PHYS. REV. <u>140</u> , 1508A-1519A (1965).	QUANT.
Co II		
GRUZDEV, P. F.	OPTICS AND SPECTROSCOPY (U.S.S.R.) <u>13</u> , 169-172 (1962).	QUANT., REL.
* * * * *		
Cr (CHROMIUM)*		
Cr I		
FRERICHS, R.	Z. PHYSIK <u>31</u> , 305-310 (1925).	EMISS., REL.
FRERICHS, R.	ANN. PHYSIK <u>81</u> , 807-845 (1926).	EMISS., REL.
ALLEN, J. S. V. & HESTHAL, C. E.	PHYS. REV. <u>47</u> , 926-931 (1935).	EMISS., REL.
ROZHDESTVENSKII, D. S. & PENKIN, N. P.	IZVEST. AKAD. NAUK S.S.S.R. SER. FIZ. <u>5</u> , 97-101 (1941) (O.T.P. 1).	HOOK, REL.
ROZHDESTVENSKII, D. S. & PENKIN, N. P.	J. PHYS. (U.S.S.R.) <u>5</u> , 319-337 (1941).	HOOK, REL. & COMM.
PENKIN, N. P.	ZHUR. EKSPTL. I TEORET. FIZ. <u>12</u> , 355-365 (1947) (O.T.P. 1).	HOOK, REL.
PENKIN, N. P.	ZHUR. EKSPTL. I TEORET. FIZ. <u>12</u> , 1114-1121 (1947) (O.T.P. 1).	HOOK, REL.
WILSON, O. C.	ASTROPHYS. J. <u>102</u> , 126-150 (1948).	MISC., REL.
ESTABROOK, F. B.	THESIS CALIFORNIA INSTITUTE OF TECHNOLOGY (1950).	ABSORPT.
HILL, A. J.	THESIS CALIFORNIA INSTITUTE OF TECHNOLOGY (1950).	ABSORPT. REL.
ESTABROOK, F. B.	ASTROPHYS. J. <u>113</u> , 684-689 (1951).	ABSORPT.

*SEE ALSO TABLE 1.

HILL, A. J. & KING, R. B.	J. OPT. SOC. AM. <u>41</u> , 315-321 (1951).	ABSORPT., REL.
HULDT, L. & LAGERQVIST, A.	ARKIV FYSIK <u>5</u> , 91-95 (1951).	EMISS.
ESTABROOK, F. B.	ASTROPHYS. J. <u>115</u> , 571-572 (1952).	COMM.
HULDT, L. & LAGERQVIST, A.	J. OPT. SOC. AM. <u>42</u> , 142 (1952).	EMISS.
DAVIS, M. H., ROUTLY, P. M. & KING, R. B.	PROCEEDINGS OF THE NATIONAL SCIENCE FOUNDATION CONFERENCE ON STELLAR ATMOSPHERES, INDIANA UNIV. <u>47-49</u> (1954).	ABSORPT.
MITROFANOVA, L. A.	PULKOVO. ASTRONOMICHESKAIA OBSERVATORIIA. IZVESTIIA <u>19</u> , #152, 100-102 (1954) (O.T.P.1).	EMISS., REL.
BELL, G. D.	THESIS CALIFORNIA INSTITUTE OF TECHNOLOGY (1956- 1957).	ABSORPT.
NIKONOVA, E. I. & PROKOF'EV, V. K.	OPTIKA I SPEKTROSKOPIYA <u>1</u> , 290-297 (1956) (TRANSL.).	HOOK, REL.
ALLEN, C. W. & ASAAD, A. S.	MONTHLY NOTICES ROY. ASTRON. SOC. <u>117</u> , 36-49 (1957).	EMISS.
HINNOV, E. & KOHN, H.	J. OPT. SOC. AM. <u>42</u> , 156-162 (1957).	EMISS.
OSTROVSKII, YU. I. & PENKIN, N. P.	OPTIKA I SPEKTROSKOPIYA <u>3</u> , 193-201 (1957) (O.T.P.1) (AD 266 652).	HOOK
DVORNIKOVA, I. U. & NAGIBINA, I. M.	OPTIKA I SPEKTROSKOPIYA <u>4</u> , 421-429 (1958) (O.T.P.2).	EMISS., REL.
ADDINK, N. W. H.	SPECTROCHIM. ACTA <u>15</u> , 349-359 (1959).	EMISS.
ALLEN, C. W.	MONTHLY NOTICES ROY. ASTRON. SOC. <u>121</u> , 299-332 (1960).	COMM. & CA
BOYARCHUK, M. E. & BOYARCHUK, A. A.	AKADEMIIA NAUK S.S.S.R. KRYMSKAIA ASTROFIZECHESKAIA OBSERVATORIIA. IZVESTIIA <u>22</u> , 234-256 (1960) (O.T.P. 1).	COMM.
WILKERSON, T. D.	THESIS UNIV. MICHIGAN (1961).	EMISS.
CHARATIS, G.	THESIS UNIV. MICHIGAN (1962).	EMISS.
CHARATIS, G. & WILKERSON, T. D.	PHYSICS OF FLUIDS <u>5</u> , 1661-1662 (1963).	COMM.
MOROZOVA, N. P. & STARTSEV, G. P.	OPTICS AND SPECTROSCOPY (U.S.S.R.) <u>17</u> , 174-176 (1964).	EMISS.
HUTCHERSON, J. W.	MASTER THESIS SOUTHERN MISSIONARY COLLEGE (1964).	EMISS., REL.
LAWRENCE, G. M., LINK, J. K. & KING, R. B.	ASTROPHYS. J. <u>141</u> , 293-307 (1965).	ABSORPT.
STEWART, J. C. & ROTENBERG, M.	PHYS. REV. <u>140</u> , 1508A-1519A (1965).	QUANT.
Gr II		
ALLEN, J. S. V. & HESTHAL, C. E.	PHYS. REV. <u>42</u> , 926-931 (1935).	EMISS., REL.
WILSON, O. C.	ASTROPHYS. J. <u>102</u> , 126-150 (1948).	MISC., REL.

ZAGORIANSKAYA, E. U.	ZHUR. EKSP. I TEORET. FIZ. <u>12</u> , 447-450 (1949) (O.T.P. 1).	EMISS. REL.
ALLER, L. H., HAZEN, M., DOHERTY, L., GRANT, G., JUGAKU, J., SPIEGEL, E. & WADDELL, J.	PUBLICATIONS OF THE OBSERVATORY, UNIV. OF MICHIGAN (FEB. 19, 1954).	MISC., REL.
BOYARCHUK, M. E. & BOYARCHUK, A. A.	AKADEMIIA NAUK S.S.S.R. KRYMSKAIA ASTROFIZICHESKAIA OBSERVATORIIA. IZVESTIIA <u>22</u> , 234-256 (1960) (O.T.P. 1).	COMM., REL.
GROTH, H. G.	Z. ASTROPHYS. <u>51</u> , 231-285 (1961).	MISC.
WILKERSON, T. D.	THESIS MICHIGAN (1961).	EMISS.
ALLER, L. H.	UNIV. OF MICHIGAN, DEPT. OF ASTRONOMY TECHNICAL NOTE #3 (1962).	MISC.
CHARATIS, G.	THESIS UNIV. MICHIGAN (1962).	EMISS.
SHACKLEFORD, W. L.	J. QUANT. SPECTROSC. RADIAT. TRANSFER <u>5</u> , 303-312 (1965).	EMISS.
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Cs (CESIUM)*		
Cs I		
FÜCHTBAUER, C. & HOFMANN, W.	ANN. PHYSIK <u>43</u> , 96-134 (1914).	ABSORPT., REL.
FÜCHTBAUER, C.	PHYSIK. Z. <u>21</u> , 322-324 (1920).	ABSORPT.
FÜCHTBAUER, C. & JOOS, G.	PHYSIK. Z. <u>23</u> , 73-80 (1922).	ABSORPT.
TOLMAN, R. C.	PHYS. REV. <u>23</u> , 693-709 (1924).	COMM.
BLEEKER, C. E.	THESIS UTRECHT (1928).	EMISS., REL.
PROKOF'EV, V. K.	Z. PHYSIK <u>52</u> , 387-393 (1929).	HOOK FORB., REL.
WAIBEL, F.	Z. PHYSIK <u>53</u> , 459-482 (1929).	ABSORPT.
MINKOWSKI, R. & MÜHLENBRUCH, W.	Z. PHYSIK <u>63</u> , 198-209 (1930).	MISC.
MUTO, T.	PROC. PHYS.-MATH. SOC. JAPAN <u>12</u> , 93-100 (1930).	QUANT.
SCHÜTZ, W.	Z. PHYSIK <u>64</u> , 682-696 (1930).	ABSORPT., REL.
PROKOF'EV, V. K.	ZHUR. EKSP. I TEORET. FIZ. <u>1</u> , 123-127 (1931) (O.T.P. 1).	HOOK FORB., REL.
FILIPPOV, A. N.	ZHUR. EKSP. I TEORET. FIZ. <u>2</u> , 24-41 (1932) (O.T.P. 1).	HOOK, REL.
RUBINOWICZ, A. & BLATON, J.	ERGEB. EXAKT. NATURW. <u>11</u> , 176-217 (1932).	COMM.
ORNSTEIN, L. S. & KEY, J.	PHYSICA <u>1</u> , 945-952 (1934).	COMM., REL.

*SEE ALSO TABLE 1.

AUTHOR	JOURNAL	CLASSIFICATION
PROKOF'EV, V. K. & SHTANDEL, G.	ZHUR. EKSPITL. I TEORET. FIZ. <u>4</u> , 359-367 (1934) (O.T.P. 1).	HOOK, REL.
HEIERMAN, J. H.	THESIS UTRECHT (1937).	EMISS.
KEY, J.	THESIS UTRECHT (1937).	EMISS., REL.
FRISH, S. E.	IZVESTIYA AKAAD. NAUK S.S.S.R. SER. FIZ. <u>14</u> , 711-715 (1950) (O.T.P. 2).	EMISS., REL.
KVATER, G. S. & MEISTER, T. G.	VESTNIK Leningrad UNIV. SER. FIZ. I KHIM. <u>2</u> , 137-158 (1952) (O.T.P. 1).	HOOK
STARTSEV, G. P.	DOKLADY AKAAD. NAUK S.S.S.R. <u>95</u> , 1181-1184 (1954).	HOOK, REL.
ALTHOFF, K.	Z. PHYSIK <u>141</u> , 33-42 (1955).	MISC.
BERSUKER, I. B.	SOVIET PHYS. - DOKLADY <u>2</u> , 167-169 (1957).	ESTIM.
VAINSHTEIN, L. A.	OPTIKA I SPEKTROSKOPIYA <u>3</u> , 313-321 (1957) (TRANSL.).	QUANT.
ARCHAMBAULT, Y., DESCUBES, J., PRIOU, M., OMONT, A. & PEBAY-PEYROULA, J.	J. PHYS. RADIUM <u>21</u> , 677-679 (1959).	MISC.
HANUS, W.	BULL. ACAD. POLON. SCI. CLASSE 3, <u>2</u> , 287-291 (1961).	COMM.
HAWKINS, W. B.	PHYS. REV. <u>123</u> , 544-547 (1961).	QUANT.
HEAVENS, O. S.	J. OPT. SOC. AM. <u>51</u> , 1058-1061 (1961).	CA
NAQVI, A. M.	GEOPHYSICS CORPORATION OF AMERICA TECHNICAL REPORT 61-21-A; ASTIA Document 263 459 (1961).	CA
BUCKA, H. & OPPEN, G.	ANN. PHYSIK <u>10</u> , 119-120 (1962).	MISC.
ROBERTS, T. G. & HALES, W. L.	U. S. ARMY MISSILE COMMAND REDSTONE ARSENAL, ALABAMA, REPORT NO. RR-TR-62-8 (1962).	CA
STONE, P. M.	THESIS UNIV. OF MICHIGAN (1962).	QUANT.
STONE, P. M.	PHYS. REV. <u>127</u> , 1151-1156 (1962).	QUANT.
VAINSHTEIN, L. A.	TRANSACTIONS OF THE P.N. LEBEDEV PHYSICS INSTITUTE <u>15</u> , PART 1, 1-50 (1962) (CBE-TR).	QUANT.
ANDERSON, E. M. & ZILITIS, V. A.	OPTICS AND SPECTROSCOPY (U.S.S.R.) <u>16</u> , 211-214 (1963).	QUANT.
AARTS, J. & BOSCH, G.	PHYSICA <u>30</u> , 1673-1681 (1964).	EMISS.
MARKOVA, G. V. & CHAIKA, M. P.	OPTICS AND SPECTROSCOPY (U.S.S.R.) <u>17</u> , 170-173 (1964).	MISC.
AGNEW, L. & SUMMERS, C...	TO BE PUBLISHED IN "PROCEEDINGS OF SEVENTH INTERNATIONAL CONFERENCE ON PHENOMENA IN IONIZED GASES" BEOGRAD, YUGOSLAVIA (1965).	ABSORPT.
HERTZBERG, M. & HOLLAND, R.	J. QUANT. SPECTROSC. RADIAT. TRANSFER <u>5</u> , 313-320 (1965).	EMISS., REL.
STEWART, J. C. & ROTENBERG, M.	PHYS. REV. <u>140</u> , 1508A-1519A (1965).	QUANT.

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Cu (COPPER)*

Cu I

VAN LINGEN, D.	THESIS UTRECHT (1936).	EMISS., REL.
VAN LINGEN, D.	PHYSICA <u>3</u> , 977-994 (1936).	EMISS., REL.
KING, R. B. & STOCKBARGER, D. C.	ASTROPHYS. J. <u>21</u> , 488-502 (1940).	ABSORPT.
SCHUTTEVAER, J. W., DE BONT, M. J. & VAN DEN BROEK, TH. H.	PHYSICA <u>10</u> , 544-552 (1943).	EMISS., REL.
VAN DEN BOLD, H. J.	THESIS UTRECHT (1945).	EMISS., REL.
DAVIS, M. H., ROUTLY, P. M. & KING, R. B.	PROCEEDINGS OF THE NATIONAL SCIENCE FOUNDATION CONFERENCE ON STELLAR ATMOSPHERES, INDIANA UNIV. <u>47-49</u> (1954).	ABSORPT.
PARCHEVSKII, G. F. & PENKIN, N. P.	SOVIET PHYS. - JETP <u>1</u> , 382-384 (1955).	HOOK, REL.
BELL, G. D.	THESIS CALIFORNIA INSTITUTE OF TECHNOLOGY (1956- 1957).	ABSORPT.
ALLEN, C. W. & ASAAD, A. S.	MONTHLY NOTICES ROY. ASTRON. SOC. <u>112</u> , 36-49 (1957).	EMISS.
BELL, G. D.	ASTRON. J. <u>62</u> , 7 (1957).	COMM.
OSTROVSKII, YU. I. & PENKIN, N. P.	OPTIKA I SPEKTROSKOPIYA <u>3</u> , 193-201 (1957) (O.T.P.1) (AD 266 652).	HOOK
BELL, G. D., DAVIS, M. H., KING, R. B. & ROUTLY, P. M.	ASTROPHYS. J. <u>122</u> , 775-796 (1958).	ABSORPT.
VARSAVSKY, C. M.	THESIS HARVARD (1958).	QUANT.
ADDINK, N. W. H.	SPECTROCHIM. ACTA <u>15</u> , 349-359 (1959).	EMISS.
VIDALE, G. L.	TECHNICAL INFORMATION SERIES REPORT R60SD331, GENERAL ELECTRIC CO., SPACE SCIENCE LABORATORY (1960) (AD 237 918).	ABSORPT.
DICKERMAN, P. J. & DEUEL, R. W.	J. QUANT. SPECTROSC. RADIAT. TRANSFER <u>4</u> , 807-817 (1964).	EMISS., REL.
RIEMANN, M.	Z. PHYSIK <u>129</u> , 38-51 (1964).	EMISS.
STEWART, J. C. & ROTENBERG, M.	PHYS. REV. <u>140</u> , 1508A-1519A (1965).	QUANT.

Cu XIX

STEWART, J. C. & ROTENBERG, M.	PHYS. REV. <u>140</u> , 1508A-1519A (1965).	QUANT.
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*SEE ALSO TABLE 1.

F (FLUORINE)*

F I

BAGUS, P. S. U. S. ATOMIC ENERGY COMMISSION ANL-6959 (1964). SCF

F II

GARSTANG, R. H. MONTHLY NOTICES ROY. ASTRON. SOC. 111, 115-124 (1951). QUANT. FORB.

YUTSIS, A. P. & VIZBARAITE, IA. I. TRUDY AKADEMII NAUK LITOVSKOI S.S.R., SERIJA B, 1 (17) 3-15 (1959). QUANT. FORB.

BOLOTIN, A. B., SHIRONAS, I. I. & BRAIMAN, M. YU. VILNIUS VALSTYBINIO V. KAPSUKO VARDU UNIVERSITETO MOKSLO DARBAI 33, MATEMATIKA FIZIKA 2, 107-112 (1960). QUANT.

F III

LEVINSON, I. B., BOLOTIN, A. B. & LEVIN, L. I. TRUDY VIL'NYUSSKOGO UN. 5, 49-55 (1956) (TRANSL.). QUANT.

YUTSIS, A. P. & VIZBARAITE, IA. I. TRUDY AKADEMII NAUK LITOVSKOI S.S.R., SERIJA B, 1 (17) 3-15 (1959). QUANT. FORB.

F IV

GARSTANG, R. H. MONTHLY NOTICES ROY. ASTRON. SOC. 111, 115-124 (1951). QUANT. FORB.

YILMAZ, H. PHYS. REV. 100, 1148-1153 (1955). QUANT. FORB.

BOLOTIN, A. B., LEVINSON, I. B. & LEVIN, L. I. SOVIET PHYS. - JETP 2, 391-395 (1956). QUANT.

F V

BOLOTIN, A. B. & YUTSIS, A. P. ZHUR. EKSP. I TEORET. FIZ. 24, 537-543 (1953) (O.T.P. 1). QUANT.

NIKITIN, A. A. & YAKUBOVSKII, O. A. SOVIET PHYS.-DOKLADY 2, 409-411 (1964). QUANT. FORB.

F VII

KANTSERIAVICHUS, A. LITOVSKII FIZICHESKII SBORNIK 2, 245-257 (1962). QUANT.

*SEE ALSO TABLE 1.

AUTHOR	JOURNAL	CLASSIFICATION
COHEN, M. & DALGARNO, A.	PROC. ROY. SOC. LONDON A <u>275</u> , 492-503 (1963).	QUANT.
FLANNERY, M. R. & STEWART, A. L.	MONTHLY NOTICES ROY. ASTRON. SOC. <u>126</u> , 387-392 (1963).	QUANT.
WEISS, A. W.	ASTROPHYS. J. <u>138</u> , 1262-1276 (1963).	SCF
BERKNER, K. H., COOPER III, W. S., KAPLAN, S. N. & PYLE, R. V.	PHYS. LETTERS <u>16</u> , 35-36 (1965).	LIFE

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FE (IRON)*

Fe I

VAN MILAAN, J. B.	Z. PHYSIK <u>34</u> , 921-923 (1925).	EMISS., REL.
FRERICHS, R.	ANN. PHYSIK <u>81</u> , 807-845 (1926).	EMISS., REL.
VAN MILAAN, J. B.	THESIS UTRECHT (1926).	EMISS., REL.
VAN MILAAN, J. B.	Z. PHYSIK <u>38</u> , 427-439 (1926).	EMISS., REL.
RUSSELL, H. N.	ASTROPHYS. J. <u>28</u> , 239-297 (1933).	ESTIM.
ALLEN, C. W.	MONTHLY NOTICES ROY. ASTRON. SOC. <u>96</u> , 145-148 (1935).	EMISS.
KING, R. B. & KING, A. S.	ASTROPHYS. J. <u>82</u> , 377-395 (1935).	ABSORPT., REL.
VAN DRIEL, H.	THESIS UTRECHT (1935).	EMISS., REL.
MENZEL, D. H. & GOLDBERG, L.	ASTROPHYS. J. <u>85</u> , 40-41 (1936).	COMM.
KING, R. B. & KING, A. S.	ASTROPHYS. J. <u>87</u> , 24-39 (1938).	ABSORPT., REL.
ROZHDESTVENSKII, D. S. & PENKIN, N. P.	IZVEST. AKAD. NAUK S.S.S.R. SER. FIZ. <u>5</u> , 97-101 (1941) (O.T.P.1).	HOOK, REL.
ROZHDESTVENSKII, D. S. & PENKIN, N. P.	J. PHYS. (U.S.S.R.) <u>5</u> , 319-337 (1941).	HOOK, REL.
KING, R. B.	ASTROPHYS. J. <u>95</u> , 78-81 (1942).	ABSORPT.
SOBOLEV, N. N.	ZHUR. EKSPTL. I TEORET. FIZ. <u>13</u> , 131-136 (1943) (O.T.P. 1).	EMISS., REL.
PETRIE, W.	CAN. J. RESEARCH A <u>25</u> , 42-48 (1947).	COMM.
GOTTSCHALK, W. M.	ASTROPHYS. J. <u>108</u> , 326-337 (1948).	QUANT., REL.
CARTER, W. W.	THESIS CALIFORNIA INSTITUTE OF TECHNOLOGY (1949).	EMISS., REL.
CARTER, W. W.	PHYS. REV. <u>76</u> , 962-966 (1949).	EMISS., REL.
CROSSWHITE, H. M.	SPECTROCHIM. ACTA <u>4</u> , 122-151 (1950).	EMISS., REL.
KOPFERMANN, H. & WESSEL, G.	Z. PHYSIK <u>130</u> , 100-108 (1951).	ABSORPT.
MITROFANOVA, L. A.	PULKOVO. ASTRONOMICHESKAI A OBSERVATORII A. IZVESTII A <u>12</u> , #149, 81-139 (1952) (O.T.P. 1).	EMISS., REL.

*SEE ALSO TABLE 1.

AUTHOR	JOURNAL	CLASSIFICATION
AARTS, J., HARTING, D. & BAKKER, C. J.	PHYSICA <u>20</u> , 1250-1258 (1954).	EMISS., REL.
PARCHEVSKII, G. F. & PENKIN, N. P.	VESTNIK LENINGRAD UNIV. SER. FIZ. I KHIM. <u>2</u> , #11, 113-118 (1954) (TRANSL. BY J. TECH., HARVARD COLLEGE OBSERVATORY, JUNE 1964).	HOOK, REL.
PARCHEVSKI, G. F. & PENKIN, N. P.	BULL. ACAD. SCI. U.S.S.R. PHYS. SER. <u>12</u> , 4-5 (1955).	COMM.
BELL, G. D.	THESIS CALIFORNIA INSTITUTE OF TECHNOLOGY (1956-1957).	ABSORPT.
OSBERGHAUS, O. & ZIOCK, K.	Z. NATURFORSCH. <u>11A</u> , 762-763 (1956).	LIFE
ALLEN, C. W. & ASAAD, A. S.	MONTHLY NOTICES ROY. ASTRON. SOC. <u>112</u> , 36-49 (1957).	EMISS.
BELL, G. D.	ASTRON. J. <u>62</u> , 7 (1957).	COMM.
HINNOV, E. & KOHN, H.	J. OPT. SOC. AM. <u>42</u> , 156-162 (1957).	EMISS.
ZIOCK, K.	Z. PHYSIK <u>142</u> , 99-112 (1957).	LIFE
BELL, G. D., DAVIS, M. H., KING, R. B. & ROUTLY, P. M.	ASTROPHYS. J. <u>122</u> , 775-796 (1958).	ABSORPT.
CROSSWHITE, H. M.	JOHNS HOPKINS SPECTROSCOPIC REPORT No. 13 (1958).	COMPIL.
MEL'NIKOV, O. A.	PULKOVO. ASTRONOMICHESKAIA OBSERVATORIIA. IZVESTIIA <u>20</u> , #6, 28-43 (1958) (O.T.P. 1).	COMM.
NAGIBINA, I. M.	BULL. ACAD. SCI. U.S.S.R. PHYS. SER. <u>22</u> , 678-679 (1958).	EMISS., REL.
NAGIBINA, I. M.	OPTIKA I SPEKTROKOPIYA <u>4</u> , 430-437 (1958) (O.T.P.2).	EMISS., REL.
ADDINK, N. W. H.	SPECTROCHIM. ACTA <u>15</u> , 349-359 (1959).	EMISS.
HEFFERLIN, R.	J. OPT. SOC. AM. <u>42</u> , 680-685 (1959).	EMISS., REL.
HEFFERLIN, R.	J. OPT. SOC. AM. <u>42</u> , 948-949 (1959).	EMISS., REL.
ZWAAN, A.	BULLETIN ASTRONOMICAL INSTITUTES NETHERLANDS <u>14</u> , 288-298 (1959).	MISC., REL.
ALLEN, C. W.	MONTHLY NOTICES ROY. ASTRON. SOC. <u>121</u> , 299-332 (1960).	COMM. & CA
BOYARCHUK, M. E. & BOYARCHUK, A. A.	AKADEMIIA NAUK S.S.S.R. KRYMSKAIA ASTROFIZICHESKAIA OBSERVATORIIA. IZVESTIIA <u>22</u> , 234-256 (1960) (O.T.P. 1).	COMM.
BELOUSOVA, I. M. & GUREVICH, D. B.	OPTICS AND SPECTROSCOPY (U.S.S.R.) <u>10</u> , 206-207 (1961).	COMM.
KOROLEV, F. A. & KVARATSKHELI, YU. K.	OPTICS AND SPECTROSCOPY (U.S.S.R.) <u>10</u> , 200-202 (1961).	EMISS., REL.
LETFUS, V.	CENTRAL ASTRONOMICAL INSTITUTES OF CZECHOSLOVAKIA: BULLETIN <u>12</u> , 161-167 (1961).	EMISS. & COMM.
LETFUS, V.	J. OPT. SOC. AM. <u>51</u> , 1151 (1961).	COMM.
OTTINGER, C. & ZIOCK, K.	Z. NATURFORSCH. <u>16A</u> , 720 (1961).	LIFE
JEFFERIES, J. T. & ORRALL, F. Q.	ASTROPHYS. J. <u>135</u> , 109-121 (1962).	ESTIM.

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LETFUS, V.	CENTRAL ASTRONOMICAL INSTITUTE OF CZECHOSLAVAKIA: BULLETIN <u>13</u> , 98-106 (1962).	COMM.
MOROZOVA, N. G., STARTSEV, G. P. & FRISH, M. S.	FIZ. PROBL. SPEKTROSKOPII, AKAO. NAUK S.S.S.R. MATERIALY 13-GO (TRINAOTSATAGO) SOVESHCH. LENINGRAO 45-51 (1962).	EMISS., REL.
ROOER, O.	Z. ASTROPHYSIK <u>55</u> , 38-45 (1962).	EMISS.
LETFUS, V.	CENTRAL ASTRONOMICAL INSTITUTES OF CZECHOSLAVAKIA: BULLETIN <u>14</u> , 155-166 (1963).	COMM.
MARGOSHES, M. & SCRIBNER, B. F.	J. RESEARCH NAT. BUR. STANDARDS <u>67A</u> , 561-568 (1963).	EMISS., REL.
AARTS, J. & BOSCH, G.	PHYSICA <u>30</u> , 1673-1681 (1964).	EMISS.
CORLISS, C. H. & WARNER, B.	ASTROPHYS. J. SUPPL. SER. <u>8</u> , #83 395-438 (1964).	EMISS., COMPIL. & COMM.
MOROZOVA, N. P. & STARTSEV, G. P.	OPTICS AND SPECTROSCOPY (U.S.S.R.) <u>17</u> , 174-176 (1964).	EMISS.
PROKOF'EV, V. K., NIKONOVA, E. I., GRUZOEV, P. F. & FRISH, M. S.	AKAOEMIJA NAUK S.S.S.R. KRYMSKAJA ASTROFIZICHESKAJA OBSERVATORIIA. IZVESTIIA <u>31</u> , 281-324 (1964).	COMM.
VALTERS, A. K., NIKONOVA, E. I. & STARTSEV, G. P.	OPTICS AND SPECTROSCOPY (U.S.S.R.) <u>16</u> , 393-395 (1964).	ABSORPT., REL.
VALTERS, A. K. & STARTSEV, G. P.	OPTICS AND SPECTROSCOPY (U.S.S.R.) <u>17</u> , 262-264 (1964).	HOOK, REL.
KING, R. B., OLSEN, K. H. & CORLISS, C. H.	ASTROPHYS. J. <u>141</u> , 354-363 (1965).	ABSORPT., REL.
KRYSMANSKI, K. H.	ANN. PHYSIK <u>15</u> , 207-224 (1965).	EMISS., REL.
SHORE, B. W.	ASTROPHYS. J. <u>142</u> , 94-105 (1965).	QUANT., SCF
STEWART, J. C. & ROTENBERG, M.	PHYS. REV. <u>140</u> , 1508A-1519A (1965).	QUANT.

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CLARKSON, W.	PHIL. MAG. <u>2</u> , 98-105 (1929).	EMISS., REL.
RUBINOWICZ, A.	Z. PHYSIK <u>65</u> , 662-676 (1930).	QUANT., REL.
RUSSELL, H. N.	ASTROPHYS. J. <u>78</u> , 239-297 (1933).	ESTIM.
SOBOLEV, N. N.	ZHUR. EKSPTL. I TEORET. FIZ. <u>13</u> , 131-136 (1943) (O.T.P. 1).	EMISS., REL.
CROSSWHITE, H. M.	SPECTROCHIM. ACTA <u>4</u> , 122-151 (1950).	EMISS., REL.
MITROFANOVA, L. A.	PULKOVO. ASTRONOMICHESKAJA OBSERVATORIIA. IZVESTIIA <u>12</u> , #151, 45-48 (1953).	EMISS., REL.

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MEL'NIKOV, O. A.	SOVIET ASTRONOMY - AJ <u>3</u> , 381-388 (1959).	MISC. & MISC. FORB., REL.
BOYARCHUK, M. E. & BOYARCHUK, A. A.	AKADEMIIA NAUK S.S.S.R. KRYMSKAIA ASTROFIZICHESKAIA OBSERVATORIIA. IZVESTIIA <u>22</u> , 234-256 (1960) (O.T.P. 1).	COMM.
GROTH, H. G.	Z. ASTROPHYS. <u>51</u> , 231-285 (1961).	MISC.
ALLER, L. H.	UNIV. OF MICHIGAN, DEPT. OF ASTRONOMY TECHNICAL NOTE #3 (1962).	MISC.
GARSTANG, R. H.	MONTHLY NOTICES ROY. ASTRON. SOC. <u>124</u> , 321-341 (1962).	QUANT. FORB.
GARSTANG, R. H.	COMMUNICATIONS FROM THE UNIVERSITY OF LONDON OBSERVATORY #57 (1962).	MISC.
GRUZDEV, P. F.	FIZ. PROBL. SPEKTROSKOPII, AKAD. NAUK S.S.S.R., MATERIALY 13-60 (TRINADTSATAGO) SOVESHCH., LENINGRAD 36-39 (1962) (TRANSL. BY J. L. TECH, HARVARD COLLEGE OBSERVATORY).	QUANT., REL.
RODER, O.	Z. ASTROPHYSIK <u>55</u> , 38-45 (1962).	EMISS.
BASCHEK, B., KEGEL, W. H. & TRAVING, G.	Z. ASTROPHYSIK <u>56</u> , 282-284 (1963).	MISC.
MOROZOVA, N. G. & STARTSEV, G. P.	OPTICS AND SPECTROSCOPY (U.S.S.R.) <u>18</u> , 505-506 (1965).	EMISS., REL.

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GARSTANG, R. H.	MONTHLY NOTICES ROY. ASTRON. SOC. <u>112</u> , 393-405 (1957).	QUANT. FORB.
GAUSTAD, J. E. & SPITZER, JR., L.	ASTROPHYS. J. <u>134</u> , 771-776 (1961).	ESTIM.
ALLER, L. H.	UNIV. OF MICHIGAN, DEPT. OF ASTRONOMY TECHNICAL NOTE #3 (1962).	MISC.

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GARSTANG, R. H.	MONTHLY NOTICES ROY. ASTRON. SOC. <u>118</u> , 572-584 (1958).	QUANT. FORB.
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Fe V

GARSTANG, R. H.	MONTHLY NOTICES ROY. ASTRON. SOC. <u>117</u> , 393-405 (1957).	QUANT. FORB.
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Fe X

EDLÉN, B.	Z. ASTROPHYS. <u>22</u> , 30-64 (1942).	QUANT. FORB.
HUANG, K.	ASTROPHYS. J. <u>101</u> , 187-195 (1945).	MISC. FORB.
PECKER, C.	COMPT. REND. <u>250</u> , 3779-3781 (1960).	MISC.
GARSTANG, R. H.	ANN. ASTROPHYS. <u>25</u> , 109-117 (1962).	COMM.
KRUEGER, T. K. & CZYZAK, S. J.	MEMOIRS ROY. ASTRON SOC. <u>69</u> , 145-182 (1965).	QUANT. FORB.

Fe XI

EDLÉN, B.	Z. ASTROPHYS. <u>22</u> , 30-64 (1942).	QUANT. FORB.
HUANG, K.	ASTROPHYS. J. <u>101</u> , 187-195 (1945).	MISC. FORB.
KRUEGER, T. K. & CZYZAK, S. J.	MEMOIRS ROY. ASTRON SOC. <u>69</u> , 145-182 (1965).	QUANT. FORB.

Fe XII

KRUEGER, T. K. & CZYZAK, S. J.	MEMOIRS ROY. ASTRON SOC. <u>69</u> , 145-182 (1965).	ESTIM. FORB.
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Fe XIII

EDLÉN, B.	Z. ASTROPHYS. <u>22</u> , 30-64 (1942).	QUANT. FORB.
HUANG, K.	ASTROPHYS. J. <u>101</u> , 187-195 (1945).	MISC. FORB.
KURT, V. G.	SOVIET ASTRONOMY-A.J. <u>6</u> , 620-624 (1963).	QUANT. FORB.
KRUEGER, T. K. & CZYZAK, S. J.	MEMOIRS ROY. ASTRON SOC. <u>69</u> , 145-182 (1965).	QUANT. FORB.

Fe XIV

EDLÉN, B.	Z. ASTROPHYS. <u>22</u> , 30-64 (1942).	QUANT. FORB.
HUANG, K.	ASTROPHYS. J. <u>101</u> , 187-195 (1945).	MISC. FORB.
GOLD, M. T.	MONTHLY NOTICES ROY. ASTRON. SOC. <u>109</u> , 471-477 (1949).	SCF
FROESE, C.	MONTHLY NOTICES ROY. ASTRON. SOC. <u>117</u> , 615-621 (1957).	SCF
GARSTANG, R. H.	ANN. ASTROPHYS. <u>25</u> , 109-117 (1962).	QUANT. FORB. & CA
KRUEGER, T. K. & CZYZAK, S. J.	MEMOIRS ROY. ASTRON SOC. <u>69</u> , 145-182 (1965).	QUANT. FORB.

Fe XV

EOLÉN, B.	Z. ASTROPHYS. <u>22</u> , 30-64 (1942).	QUANT. FORB.
OSTERBROCK, D. E.	ASTROPHYS. J. <u>114</u> , 469-472 (1951).	QUANT. FORB.
BLAHA, M.	CENTRAL ASTRONOMICAL INSTITUTES OF CZECHOSLOVAKIA: BULLETIN <u>8</u> , 34-37 (1957).	QUANT. FORB.
FIROR, J. & ZIRIN, H.	ASTROPHYS. J. <u>135</u> , 122-137 (1962).	QUANT.
FROESE, C.	ASTROPHYS. J. <u>140</u> , 361-365 (1964).	SCF
KRUEGER, T. K. & CZYZAK, S. J.	MEMOIRS ROY. ASTRON SOC. <u>62</u> , 145-182 (1965).	QUANT. & QUANT. FORB.

Fe XVI

FROESE, C.	ASTROPHYS. J. <u>140</u> , 361-365 (1964).	SCF
KRUEGER, T. K. & CZYZAK, S. J.	MEMOIRS ROY. ASTRON SOC. <u>62</u> , 145-182 (1965).	QUANT. & QUANT. FORB.
STEWART, J. C. & ROTENBERG, M.	PHYS. REV. <u>140</u> , 1508A-1519A (1965).	QUANT.

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GA (GALLIUM)*

Ga I

ALLEN, C. W.	MONTHLY NOTICES ROY. ASTRON. SOC. <u>112</u> , 622-628 (1957).	COMM.
ALLEN, C. W. & ASAAD, A. S.	MONTHLY NOTICES ROY. ASTRON. SOC. <u>112</u> , 36-49 (1957).	EMISS.
OSTROVSKII, YU. I. & PENKIN, N. P.	OPTIKA I SPEKTROSKOPIYA <u>4</u> , 719-724 (1958) (O.T.P.1).	HOOK
OSTROVSKII, YU. I., PENKIN, N. P. & SHABANOVA, L. N.	BULL. ACAD. SCI. U.S.S.R. PHYS. SER. <u>22</u> , 720-724 (1958).	HOOK
BREHM, B., DEMTRÖDER, W. & OSBERGHAUS, O.	Z. NATURFORSCH. <u>16A</u> , 843 (1961).	LIFE
DEMTRÖDER, W.	THESIS BONN (1961).	LIFE
HANUS, W.	BULL. ACAD. POLON. SCI. CLASSE 3, <u>8</u> , 629-636 (1961).	COMM.
OTTINGER, C. & ZIOCK, K.	Z. NATURFORSCH. <u>16A</u> , 720 (1961).	LIFE
DEMTRÖDER, W.	Z. PHYSIK <u>166</u> , 42-55 (1962).	LIFE
PENKIN, N. P. & SHABANOVA, L. N.	OPTICS AND SPECTROSCOPY (U.S.S.R.) <u>14</u> , 5-8 (1963).	HOOK
PENKIN, N. P. & SHABANOVA, L. N.	OPTICS AND SPECTROSCOPY (U.S.S.R.) <u>14</u> , 87-88 (1963).	HOOK
LUBOWIECKA, T.	ACTA PHYS. POLON. <u>25</u> , 849-851 (1964).	EMISS., REL.

*SEE ALSO TABLE 1.

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LAWRENCE, G. M., LINK, J. K. & KING, R. B.	ASTROPHYS. J. <u>141</u> , 293-307 (1965).	ABSORPT.
PENKIN, N. P. & SHABANOVA, L. N.	OPTICS AND SPECTROSCOPY (U.S.S.R.) <u>18</u> , 504 (1965).	HOOK, REL. & HOOK
PENKIN, N. P. & SHABANOVA, L. N.	OPTICS AND SPECTROSCOPY (U.S.S.R.) <u>18</u> , 535-537 (1965).	COMM.
GA II		
HELLIWELL, T. M.	THESIS CALIFORNIA INSTITUTE OF TECHNOLOGY (1963).	QUANT.
HELLIWELL, T. M.	PHYS. REV. <u>135</u> , A325-A331 (1964).	QUANT.
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GE (GERMANIUM)*		
Ge I		
KHOKHLOV, M. Z.	AKADEMIJA NAUK S.S.S.R. KRYMSKAJA ASTROFIZICHESKAJA OBSERVATORIIA. IZVESTIIA <u>26</u> , 52-62 (1961).	QUANT.
KHOKHLOV, M. Z.	AKADEMIJA NAUK S.S.S.R. KRYMSKAJA ASTROFIZICHESKAJA OBSERVATORIIA. IZVESTIIA <u>28</u> , 277-287 (1962).	ABSORPT., REL.
KHOKHLOV, M. Z.	AKADEMIJA NAUK S.S.S.R. KRYMSKAJA ASTROFIZICHESKAJA OBSERVATORIIA. IZVESTIIA <u>29</u> , 131-140 (1963).	EMISS., REL., ABSORPT., REL. & COMM.
SLAVENAS, I. YU. YU.	OPTICS AND SPECTROSCOPY (U.S.S.R.) <u>16</u> , 214-216 (1964).	HOOK, REL.
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H (HYDROGEN)*		
H I		
HOYT, F. C.	PHIL. MAG. <u>47</u> , 826-831 (1924).	QUANT., REL.
SLACK, F. G.	PHYS. REV. <u>28</u> , 1-12 (1926).	LIFE
CREW, W. H. & HULBURT, E. O.	PHYS. REV. <u>29</u> , 843-847 (1927).	EMISS., REL.
SUGIURA, M. Y.	J. PHYS. RADIUM <u>8</u> , 113-124 (1927).	QUANT.
WIEN, W.	MÜNCH. TIERÄRZTL. WOCHSCHR. 89-91 (1927).	CANAL
CARST, A. & LADENBURG, R.	Z. PHYSIK <u>48</u> , 192-204 (1928).	HOOK, REL.
KUPPER, A.	ANN. PHYSIK <u>86</u> , 511-529 (1928).	QUANT.

*SEE ALSO TABLE 1.

SLACK, F. G.	PHYS. REV. <u>31</u> , 527-532 (1928).	QUANT.
SNOEK, J. L. & ORNSTEIN, L. S.	Z. PHYSIK <u>50</u> , 600-608 (1928).	ABSORPT., REL.
SUGIURA, Y.	SCIENCE PAPERS OF THE INSTITUTE OF PHYSICAL AND CHEMICAL RESEARCH <u>11</u> , 1-80 (1929).	QUANT.
MENZEL, D. H.	PUBL. LICK OBSERVATORY <u>12</u> , 232-238 (1930).	COMM. & ESTIM.
STEVENSON, A. F.	PROC. ROY. SOC. LONDON A <u>128</u> , 591-599 (1930).	QUANT. FORB.
MAXWELL, L. R.	PHYS. REV. <u>38</u> , 1664-1686 (1931).	COMM.
RUSSELL, H. N.	ASTROPHYS. J. <u>78</u> , 239-297 (1933).	ESTIM.
GRIFFITHS, J. H. E.	PROC. ROY. SOC. LONDON A <u>147</u> , 547-554 (1934).	LIFE
WOOLLEY, R.	MONTHLY NOTICES ROY. ASTRON. SOC. <u>25</u> , 101-116 (1934).	COMPIL.
KREISLER, J.	ACTA PHYS. POLON. <u>4</u> , 151-161 (1935).	QUANT.
MENZEL, D. H. & PEKERIS, C. L.	MONTHLY NOTICES ROY. ASTRON. SOC. <u>26</u> , 77-111 (1935).	QUANT.
RUONICK, P.	PHYS. REV. <u>48</u> , 807-811 (1935).	QUANT.
BREIT, G. & TELLER, E.	ASTROPHYS. J. <u>91</u> , 215-238 (1940).	QUANT. FORB.
BIERMANN, L.	PHYSIK. Z. <u>44</u> , 232-233 (1943).	QUANT.
VESELOV, M. G.	ZHUR. EKSPTL. I TEORET. FIZ. <u>19</u> , 959-964 (1949) (ATS transl.).	QUANT.
SPITZER, JR., L. & GREENSTEIN, J. L.	ASTROPHYS. J. <u>114</u> , 407-420 (1951).	QUANT. FORB.
KIPPER, A. Y.	TARTU. ESTONIA. ÜLIKOOK, TAHETORN <u>32</u> , 63-93 (1952) (O.T.P. 2).	QUANT. FORB.
WILO, J. P.	ASTROPHYS. J. <u>115</u> , 206-221 (1952).	QUANT.
HARRIMAN, J. M.	PHYS. REV. <u>101</u> , 594-598 (1956).	QUANT.
BETHE, H. A. & SALPETER, E. E.	"QUANTUM MECHANICS OF ONE AND TWO ELECTRON ATOMS" (ACADEMIC PRESS, NEW YORK, 1957).	COMPIL.
GREEN, L. C., RUSH, P. P. & CHANOLER, C. D.	ASTROPHYS. J. SUPPL. SER. <u>3</u> , 37-50 (1957).	QUANT.
FITE, W. L., BRACKMANN, R. T., HUMMER, D. G. & STEBBINGS, R. F.	PHYS. REV. <u>116</u> , 363-367 (1959).	LIFE FORB.
SHAPIRO, J. & BREIT, G.	PHYS. REV. <u>113</u> , 179-181 (1959).	QUANT. FORB.
DEMIOOV, V. P.	ASTRONOMICHESKII ZHURNAL <u>38</u> , 1065-1068 (1961).	QUANT. FORB.
HEROAN, R. & HUGHES, T. P.	ASTROPHYS. J. <u>133</u> , 294-298 (1961).	QUANT.
HERDAN, R. & HUGHES, T. P.	ASTROPHYS. J. <u>134</u> , 1028 (1961).	COMM.
KARZAS, W. J. & LATTER, R.	ASTROPHYS. J. SUPPL. SER. <u>6</u> , 167-212 (1961).	QUANT.
VAINSHTEIN, L. A.	TRANSACTIONS OF THE P.N. LEBEOEV PHYSICS INSTITUTE <u>15</u> , PART 1, 1-50 (1962) (CBE-TR).	QUANT.
MORSE, T. A. & KAUFMAN, F.	J. CHEM. PHYS. <u>42</u> , 1785-1790 (1965).	ABSORPT.

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HE (HELIUM)*

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LEVY, S.	Z. PHYSIK <u>72</u> , 578-586 (1931).	HOOK, REL.
VINTI, J. P.	PHYS. REV. <u>42</u> , 632-640 (1932).	QUANT.
RUSSELL, H. N.	ASTROPHYS. J. <u>78</u> , 239-297 (1933).	ESTIM.
WHEELER, J. A.	PHYS. REV. <u>43</u> , 258-263 (1933).	QUANT.
KÖRWIEN, H.	Z. PHYSIK <u>91</u> , 1-36 (1934).	QUANT.
KREISLER, J.	ACTA PHYS. POLON. <u>4</u> , 151-161 (1935).	QUANT.
HYLLERAAS, E. A.	Z. PHYSIK <u>106</u> , 395-404 (1937).	QUANT.
GOLDBERG, L.	ASTROPHYS. J. <u>90</u> , 414-428 (1939).	QUANT.
BREIT, G. & TELLER, E.	ASTROPHYS. J. <u>91</u> , 215-238 (1940).	QUANT. FORB.
GOLDBERG, L.	ASTROPHYS. J. <u>93</u> , 244-249 (1941).	QUANT. FORB.
ROMBERG, W.	PHYS. REV. <u>71</u> , 706-711 (1947).	SCF
HUANG, SU-SHU	ASTROPHYS. J. <u>108</u> , 354-372 (1948).	COMM.
BATES, D. R. & DAMGAARD, A.	PHIL. TRANS. ROY. SOC. LONDON. SER. A. <u>242</u> , 101-122 (1949).	CA
BATES, D. R. & DAMGAARD, A.	PHIL. TRANS. ROY. SOC. LONDON SER. A. <u>242</u> , 101-122 (1949).	CA
VESELOV, M. G.	ZHUR. EKSPTL. I TEORET. FIZ. <u>12</u> , 959-964 (1949) (ATS transl.).	QUANT.
BROCHARD, J.	THESIS PARIS (1950).	ABSORPT., REL.
WELLMANN, P.	Z. ASTROPHYS. <u>30</u> , 71-87 (1952).	ESTIM.
VESELOV, M. G.	VESTNIK LENINGRAD UNIV. SER. FIZ. I KHIM. No. 8, 181-185 (1953) (O.T.P. 1).	QUANT.
HERON, S., McWHIRTER, R. W. P. & RHODERICK, E. H.	NATURE <u>174</u> , 564-565 (1954).	LIFE
HERON, S., McWHIRTER, R. W. P. & RHODERICK, E. H.	PROC. ROY. SOC. LONDON A <u>234</u> 565-582 (1956).	LIFE
MILLER, W. F.	THESIS PURDUE (1956).	COMM.
VIZBARAITE, YA. I., KANTSEREVICHYUS, A. I. & YUTSIS, A. P.	OPTIKA I SPEKTROSKOPIYA <u>1</u> , 9-16 (1956) (O.T.P. 1).	SCF
YUTSIS, A. P., USHPALIS, K. K., KAVETSKIS, V. I. & LEVINSON, I. B.	OPTIKA I SPEKTROSKOPIYA <u>1</u> , 601-605 (1956) (O.T.P. 1).	QUANT.
DALGARNO, A. & LYNN, N.	PROC. PHYS. SOC. LONDON A <u>70</u> , 802-808 (1957).	ESTIM.
MILLER, W. F. & PLATZMAN, R. L.	PROC. PHYS. SOC. LONDON A <u>70</u> , 299-303 (1957).	COMM.

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TREFFTZ, E., SCHLÜTER, A., DETTMAR, K. H. & JÖRGENS, K.	Z. ASTROPHYS. <u>44</u> , 1-17 (1957).	SCF
DALGARNO, A. & KINGSTON, A. E.	PROC. PHYS. SOC. LONDON A <u>72</u> , 1053-1060 (1958).	ESTIM.
MASTRUP, F. & WIESE, W.	Z. ASTROPHYS. <u>44</u> , 259-279 (1958).	EMISS. REL.
OSHEROVICH, A. L. & SAVICH, I. G.	OPTIKA I SPEKTROKOPIYA <u>4</u> , 715-718 (1958) (O.T.P.1).	LIFE
USHPALIS, K. K., KUZMITSKITE, L. L. & BUDRITE, S. D.	TRUDY AKADEMII NAUK LITOVSKOI S.S.R. SERIJA B 3 (15) 47-53 (1958).	QUANT.
VARSAVSKY, C. M.	THESIS HARVARD (1958).	QUANT.
ALLER, L. H. & JUGAKU, J.	ASTROPHYS. J. SUPPL. SER. <u>4</u> , #38, 109-156 (1959).	CA
BENNETT, R. G. & DALBY, F. W.	J. CHEM. PHYS. <u>31</u> , 434-441 (1959).	LIFE
DALGARNO, A. & STEWART, A. L.	PRDC. PHYS. SOC. LONDON A <u>76</u> , 49-55 (1960).	ESTIM.
DECOMPS, B., PEBAY-PEYROULA, J. C. & BROSSEL, J.	COMPT. RENO. <u>251</u> , 941-943 (1960) (TRANSL.).	MISC.
GABRIEL, A. H. & HEOOLE, D. W.	PROC. ROY. SOC. LONDON A <u>258</u> , 124-145 (1960).	CA
KUNISZ, M. D. & SEQUIER, J.	J. PHYS. RADIUM <u>21</u> , 527-531 (1960).	EMISS., REL.
YUTSIS, A. P. & VIZBARAITE, IA. I. & ERINGIS, K. K.	TRUDY AKADEMII NAUK LITOVSKOI S.S.R., SERIJA B, 3 (26) 99-105 (1961) (O.T.P. 2).	QUANT.
KANTSERIAVICHUS, A.	LITOVSKII FIZICHESKII SBORNIK <u>2</u> , 245-257 (1962).	QUANT.
MCLEAN, E. A.	"FOURTH SYMPOSIUM ON TEMPERATURE: ITS MEASURE- MENT AND CONTROL IN SCIENCE AND INDUSTRY" (ED. HERZFELD, C. M., REINHOLD PUBL., NEW YORK 1962).	EMISS.
SALPETER, E. E. & ZAIOL, VAINSHTEIN, L. A.	PHYS. REV. <u>125</u> , 248-255 (1962).	QUANT.
BÖTTICHER, W., RÖDER, O. & WOBIG, K. H.	TRANSACTIONS OF THE P.N. LEBEDEV PHYSICS INSTITUTE <u>15</u> , PART 1, 1-50 (1962) (CBE-TR).	QUANT.
GEIGER, J.	Z. PHYSIK <u>175</u> , 480-489 (1963).	EMISS.
HELLIWELL, T. M.	Z. PHYSIK <u>175</u> , 530-542 (1963).	MISC.
HOLZBERLEIN, T. M.	THESIS CALIFORNIA INSTITUTE OF TECHNOLOGY (1963).	QUANT.
BAKOS, J. & SZIGETTI, J.	THESIS OKLAHOMA UNIV. (1963). (AFOSR-62-378).	LIFE
FOWLER, R. G., HOLZBERLEIN, T. M.	KOSP. FIZ. KUT. INT. KOZLEMENYEK <u>12</u> , 125-134 (1964).	LIFE
JACOBSON, C. H. & CORRIGAN, S. J. B.	PROC. PHYS. SOC. (LONDON) A <u>84</u> , 539-543 (1964).	LIFE
GREEN, L. C., KOLCHIN, E. K. & JOHNSON, N. C.	SUBMITTED FOR PUBLICATION IN THE TRANSACTIONS OF THE INTERNATIONAL ASTRONOMICAL UNION SYMPOSIUM #26 (1964).	QUANT.
HELLIWELL, T. M.	PHYS. REV. <u>135</u> , A325-A331 (1964).	QUANT.

HOLZBERLEIN, T. M.	REV. SCI. INSTR. <u>35</u> , 1041-1046 (1964).	LIFE
KUHN, H. G.	ACTA PHYS. POLON. <u>26</u> , 315-321 (1964).	MISC.
KUHN, H. G. & VAUGHAN, J. M.	PROC. ROY. SOC. LONDON A <u>277</u> , 297-311 (1964).	MISC.
LINCKE, R.	THESIS MARYLAND UNIV. (1964) (AFCRL-64-960).	EMISS.
McDOWELL, M. R. C. & STAUFFER, A. D.	PHYSICS LETTERS <u>12</u> , 207-208 (1964).	QUANT. FORB.
SCHIFF, B. & PEKERIS, C. L.	PHYS. REV. <u>134</u> , A638-A640 (1964).	QUANT.
VIOAL, C. R.	Z. NATURFORSCH. <u>19A</u> , 1018 (1964).	EMISS., REL.
ALTICK, P. L. & MOORE, E. N.	PHYS. REV. LETTERS <u>15</u> , 100-102 (1965).	QUANT.
BENNETT, JR., W. R. KINDLMANN, P. J. & MERCER, G. N.	APPLIED OPTICS SUPPLEMENT 2 OF CHEMICAL LASERS <u>34-57</u> (1965).	LIFE
BOERSCH, H. & REICH, H. J.	OPTIK <u>22</u> , 289-306 (1965).	MISC., REL.
GALLERON-JULIENNE, C. & DESCUBES, KOROLYOV, F. A. & OJOINTSOV, V. I.	COMP. RENO. <u>261</u> , 916-918 (1965).	MISC.
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KUHN, H. G., LEWIS, E. L. & VAUGHAN, J. M.	PHYS. REV. LETTERS <u>15</u> , 687-688 (1965).	COMM.
PENOLETON, JR., W. R.	THESIS UNIV. OF MARYLAND (1965).	LIFE
PENOLETON, W. R. & HUGHES, R. H.	PHYS. REV. <u>138</u> , A683-A687 (1965).	LIFE

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MAXWELL, L. R.	PHYS. REV. <u>38</u> , 1664-1686 (1931).	COMM.
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Hg (MERCURY)*

Hg I

FÜCHTBAUER, C. & JOOS, G.	PHYSIK. Z. <u>23</u> , 73-80 (1922).	ABSORPT.
FÜCHTBAUER, C., JOOS, G. & DINKELACKER, O.	ANN. PHYSIK <u>71</u> , 204-227 (1923).	ABSORPT.
TOLMAN, R. C.	PHYS. REV. <u>23</u> , 693-709 (1924).	COMM.
WIEN, W.	ANN. PHYSIK <u>73</u> , 483-504 (1924).	CANAL
SKINNER, H. W. B.	PROC. ROY. SOC. LONDON A <u>112</u> , 642-660 (1926).	MISC.
TRUMPY, B.	Z. PHYSIK <u>40</u> , 594-617 (1926).	COMM.
HUGHES, A. L. & THOMAS, A. R.	PHYS. REV. <u>30</u> , 466-472 (1927).	ABSORPT.
TRUMPY, B.	KGL. NORSKE VIDEENSKAB. SELSKABS, SKRIFTER <u>1</u> , 1-80 (1927).	ABSORPT.

*SEE ALSO TABLE 1.

KUNZE, P.	ANN. PHYSIK <u>85</u> , 1013-1057 (1928).	ABSORPT.
GAVIOLA, E.	CONTRIBUCION AL ESTUDIO DE LAS CIENCIAS. FISICAS Y MATEMATICAS, LA PLATA, ARGENTINA <u>5</u> , 65-75 (1929). UNIVERSIDAD NACIONAL DE LA PLATA PUBLICACIONES DE LA FACULTAD DE CIENCIAS FISICOMATEMATICAS (TRANSL.).	COMM. FORB.
KOPFERMANN, H. & TIETZE, W.	Z. PHYSIK <u>56</u> , 604-616 (1929).	ABSORPT.
LADENBURG, R.	NACHR. AKAD. WISS. GÖTTINGEN, MATH.-PHYSIK. KL. 1-5 (1929).	HOOK
WEBB, H. W. & MESSENGER, H. A.	PHYS. REV. <u>33</u> , 319-328 (1929).	LIFE
LADENBURG, R. & WOLFSOHN, G.	Z. PHYSIK <u>63</u> , 616-633 (1930).	HOOK
LADENBURG, R. & WOLFSOHN, G.	Z. PHYSIK <u>65</u> , 207-208 (1930).	COMM.
RANDALL, R. H.	PHYS. REV. <u>35</u> , 1161-1169 (1930).	LIFE
RICHTER, E. F.	ANN. PHYSIK <u>2</u> , 293-328 (1930).	MISC.
THOMAS, A. R.	PHYS. REV. <u>35</u> , 1253-1261 (1930).	ABSORPT.
GARRETT, P. H. & WEBB, H. W.	PHYS. REV. <u>37</u> , 1686 (1931).	LIFE
GARRETT, P. H.	PHYS. REV. <u>40</u> , 779-790 (1932).	LIFE
MITCHELL, A. C. G.	PHYS. REV. <u>43</u> , 887-893 (1933).	COMM.
WOLFSOHN, G.	Z. PHYSIK <u>83</u> , 234-247 (1933).	HOOK
WOLFSOHN, G.	Z. PHYSIK <u>85</u> , 366-372 (1933).	HOOK
MITCHELL, A. C. G. & MURPHY, E. J.	PHYS. REV. <u>45</u> , 759 (1934).	MISC.
MITCHELL, A. C. G. & MURPHY, E. J.	PHYS. REV. <u>46</u> , 53-58 (1934).	MISC.
OPECHOWSKI, W.	Z. PHYSIK <u>109</u> , 485-490 (1938).	COMM. FORB.
KING, G. W. & VAN VLECK, J. H.	PHYS. REV. <u>56</u> , 464-465 (1939).	QUANT. FORB., REL.
SCHOUTEN, J. W.	THESIS UTRECHT (1941).	EMISS.
SCHOUTEN, J. W.	PHYSICA <u>10</u> , 672-678 (1943).	EMISS., REL.
SCHOUTEN, J. W. & SMIT, J. A.	PHYSICA <u>10</u> , 661-671 (1943).	EMISS.
LENNUIER, R. & COJAN, J. L.	COMPT. REND. <u>231</u> , 1450-1452 (1950).	MISC.
MISHRA, B.	PHYS. REV. <u>77</u> , 153 (1950).	SCF
BROSSEL, J.	PHYS. REV. <u>83</u> , 210 (1951).	MISC.
BROSSEL, J.	THESIS PARIS (1952).	MISC.
BROSSEL, J.	ANN. PHYS. <u>2</u> , 622-627 (1952).	MISC.
BROSSEL, J. & BITTER, F.	PHYS. REV. <u>86</u> , 308-316 (1952).	MISC.
MISHRA, B.	PROC. CAMBRIDGE PHIL. SOC. <u>48</u> , 511-515 (1952).	SCF
VAINSHTEIN, L. A. & YAVORSKII, B. M.	DOKLADY AKAD. NAUK S.S.S.R. <u>87</u> , 919-922 (1952) (O.T.P. 1).	QUANT.
VAINSHTEIN, L. A. & YAVORSKII, B. M.	ZHUR. EKSP. I TEORET. FIZ. <u>22</u> , 712-718 (1954) (SLA transl. RT-3363).	SCF

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LEBEDEVA, V. V. & FABRIKANT, V. A.	BULL. ACAD. SCI. U.S.S.R. PHYS. SER. <u>19</u> , 2-4 (1955).	EMISS., REL. & QUANT., REL.
GUIOCHON, M. A., BLAMONT, J. E. & BROSSEL, J.	COMPT. REND. <u>243</u> , 1859-1862 (1956).	MISC.
BARRAT, J. P.	COMPT. REND. <u>244</u> , 2785-2788 (1957) (TRANSL.).	MISC.
BOUTRON, F., BARRAT, J. P. & BROSSEL, J.	COMPT. REND. <u>245</u> , 2250-2253 (1957).	MISC.
GUIOCHON, M. A., BLAMONT, J. E. & BROSSEL, J.	J. PHYS. RADIUM <u>18</u> , 99-108 (1957).	MISC.
VAINSHTEIN, L. A.	OPTIKA I SPEKTROKOPIYA <u>3</u> , 313-321 (1957) (TRANSL.).	QUANT.
DESCOUBES, J. P. & PEBAY- PEYROULA, J. C.	COMPT. REND. <u>247</u> , 2330-2332 (1958) (TRANSL.).	MISC.
STRIJLAND, J. C. & NANASSY, A. J.	PHYSICA <u>24</u> , 935-936 (1958).	COMM.
ADDINK, N. W. H.	SPECTROCHIM. ACTA <u>15</u> , 349-359 (1959).	EMISS.
BARRAT, J. P.	THESIS PARIS (1959).	MISC.
BARRAT, J. P.	J. PHYS. RADIUM <u>20</u> , 657-668 (1959).	MISC.
COJAN, J. . & THIBEAU, M.	COMPT. REND. <u>249</u> , 1489-1491 (1959). (TRANSL.).	MISC.
PEBAY-PEYROULA, J. C.	J. PHYS. RADIUM <u>20</u> , 721-729 (1959).	MISC.
PEBAY-PEYROULA, J. C.	THESIS PARIS (1959).	MISC.
LEŚ, Z. & NIEWODNICZAŃSKI, H.	ACTA PHYS. POLON. <u>20</u> , 701-714 (1961).	EMISS., REL.
GARSTANG, R. H.	J. OPT. SOC. AM. <u>52</u> , 845-851 (1962).	QUANT.
KOEDAM, M. & KRUIHOF, A. A.	PHYSICA <u>28</u> , 80-100 (1962).	ABSORPT.
VAINSHTEIN, L. A.	TRANSACTIONS OF THE P.N. LEBEDEV PHYSICS INSTITUTE <u>15</u> , PART 1, 1-50 (1962) (CBE-TR).	QUANT.
VAINSHTEIN, L. A. & POLUEKTOV, I. A.	OPTICS AND SPECTROSCOPY (U.S.S.R.) <u>12</u> , 254-257 (1962).	QUANT., REL.
AGARBICEANU, I., KUKUREZIANU, I., POPESKU, I. & VASILIU, V.	OPTICS AND SPECTROSCOPY (U.S.S.R.) <u>14</u> , 8-10 (1963).	MISC.
AGARBICEANU, I. I., POPESKU, I. M., KUKUREZIANU, I. & VASILIU, V.	COMP. REND. <u>257</u> , 2264-2267 (1963).	MISC.
HELLIWELL, T. M.	THESIS CALIFORNIA INSTITUTE OF TECHNOLOGY (1963).	QUANT.
AGARBICEANU, I. I., POPESKU, I. M., KUKUREZIANU, I. & VASILIU, V.	OPTICS AND SPECTROSCOPY (U.S.S.R.) <u>17</u> , 258-261 (1964).	MISC.

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BARRAT, J. P., CHIRON, B. & COJAN, J. L.	COMP. REND. <u>259</u> , 3475-3478 (1964).	MISC.
GOULLET, G. & PEBAY-PEYROULA, J. C.	COMP. REND. <u>259</u> , 93-96 (1964).	MISC.
HELLIWELL, T. M.	PHYS. REV. <u>135</u> , A325-A331 (1964).	QUANT.
BARRAT, J. P., COJAN, J. L. & LECLUSE, Y.	COMP. REND. <u>260</u> , 1893-1896 (1965).	MISC.
BIGEON, M. C. & COJAN, J. L.	COMP. REND. <u>261</u> , 913-915 (1965).	MISC.
LURIO, A.	PHYS. REV. <u>140</u> , 1505A-1508A (1965).	MISC.
OAKBERG, T. C.	THESIS UNIV. OF CINCINNATI MICROFILM #64-11, 975 (1965).	EMISS.
STEWART, J. C. & ROTENBERG, M.	PHYS. REV. <u>140</u> , 1508A-1519A (1965).	QUANT.
Hg III		
MAXWELL, L. R.	PHYS. REV. <u>34</u> , 199-206 (1929).	LIFE
Hg IV		
MAXWELL, L. R.	PHYS. REV. <u>34</u> , 199-206 (1929).	LIFE
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I (IODINE)*		
I I		
TOLMAN, R. C.	PHYS. REV. <u>23</u> , 693-709 (1924).	COMM.
I II		
MARTIN, W. C. & CORLISS, C. H.	J. RESEARCH NAT. BUR. STANDARDS <u>64A</u> , 443-479 (1960).	QUANT. FORB.
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In (INDIUM)*		
In I		
KUNISZ, M. D.	ACTA PHYS. POLON. <u>12</u> , 455-461 (1958).	EMISS., REL.

*SEE ALSO TABLE 1.

AUTHOR	JOURNAL	CLASSIFICATION
OSTROVSKII, YU. I. & PENKIN, N. P.	OPTIKA I SPEKTROSKOPIYA <u>4</u> , 719-724 (1958) (O.T.P.1).	HOOK
OSTROVSKII, YU. I., PENKIN, N. P. & SHABANOVA, L. N.	BULL. ACAD. SCI. U.S.S.R. PHYS. SER. <u>22</u> , 720-724 (1958).	HOOK
OSTROVSKII, YU. I., PENKIN, N. P. & SHABANOVA, L. N.	SOVIET PHYS.-DOKLADY <u>3</u> , 538-540 (1958).	HOOK
VAINSHTEIN, L. A.	BULL. ACAD. SCI. U.S.S.R. PHYS. SER. <u>22</u> , 668-669 (1958).	SCF
CH'EN, S. Y. & SMITH, A.	PHYSICA <u>25</u> , 1289-1293 (1959).	ABSORPT.
HANUS, W.	BULL. ACAD. POLON. SCI. CLASSE <u>3</u> , <u>8</u> , 629-636 (1961).	QUANT.
PENKIN, N. P. & SHABANOVA, L. N.	OPTICS AND SPECTROSCOPY (U.S.S.R.) <u>14</u> , 5-8 (1963).	HOOK
PENKIN, N. P. & SHABANOVA, L. N.	OPTICS AND SPECTROSCOPY (U.S.S.R.) <u>14</u> , 87-88 (1963).	HOOK
HULPKE, E., PAUL, E. & PAUL, W.	Z. PHYSIK <u>177</u> , 257-268 (1964).	LIFE
LAWRENCE, G. M., LINK, J. K. & KING, R. B.	ASTROPHYS. J. <u>141</u> , 293-307 (1965).	ABSORPT.
PENKIN, N. P. & SHABANOVA, L. N.	OPTICS AND SPECTROSCOPY (U.S.S.R.) <u>18</u> , 535-537 (1965).	COMM.

IN II

HELLIWELL, T. M.	THESIS CALIFORNIA INSTITUTE OF TECHNOLOGY (1963).	QUANT.
HELLIWELL, T. M.	PHYS. REV. <u>135</u> , A325-A331 (1964).	QUANT.

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K (POTASSIUM)*

K I

RUPP, E.	ANN. PHYSIK <u>80</u> , 524-532 (1926).	CANAL
DITCHBURN, R. W.	PROC. ROY. SOC. LONDON A <u>117</u> , 486-508 (1927).	ABSORPT.
PROKOF'EV, V. K. & GAMOW, G.	Z. PHYSIK <u>44</u> , 887-892 (1927).	HOOK, REL.
BLEEKER, C. E.	THESIS UTRECHT (1928).	EMISS., REL. & HOOK, REL.
LAWRENCE, E. O. & EDLEFSEN, N. E.	PHYS. REV. <u>34</u> , 1056-1060 (1929).	ABSORPT.
PROKOF'EV, V. K.	Z. PHYSIK <u>52</u> , 387-393 (1929).	HOOK FORB., REL.
WEILER, J.	ANN. PHYSIK <u>1</u> , 361-399 (1929).	MISC., REL.
STEVENSON, A. F.	PROC. ROY. SOC. LONDON A <u>128</u> , 591-599 (1930).	QUANT. FORB.

*SEE ALSO TABLE 1.

AUTHOR	JOURNAL	CLASSIFICATION
PROKOF'EV, V. K.	ZHUR. EKSPTL. I TEORET. FIZ. 1, 123-127 (1931) (O.T.P. 1).	HOOK FORB., REL.
FILIPPOV, A. N.	ZHUR. EKSPTL. I TEORET. FIZ. 2, 24-41 (1932) (O.T.P. 1).	HOOK, REL.
RUBINOWICZ, A. & BLATON, J.	ERGEB. EXAKT. NATURW. 11, 176-217 (1932).	COMM.
FILIPPOV, A. N.	PHYSIK. Z. SOWJETUNION 5, 1-5 (1933).	HOOK, REL.
FILIPPOV, A. N.	ZHUR. EKSPTL. I TEORET. FIZ. 3, 520-523 (1933) (O.T.P. 1).	HOOK, REL.
ORNSTEIN, L. S. & KEY, J.	PHYSICA 1, 945-952 (1934).	EMISS., REL.
PROKOF'EV, V. K.	ZHUR. EKSPTL. I TEORET. FIZ. 4, 347-358 (1934) (O.T.P. 1).	HOOK, REL.
VAN DER HELD, E. F. M. & HEIERMAN, J. H.	PHYSICA 2, 71-74 (1935).	EMISS., REL.
COENEN, P. A. & KRAMERS, H. A.	PHYSICA 3, 341-345 (1936).	QUANT.
SINCLAIR, D. & WEBB, H. W.	PHYS. REV. 50, 440-445 (1936).	LIFE
VAN DER HELD, E. F. M. & HEIERMAN, J. H.	PHYSICA 3, 31-41 (1936).	EMISS.
HEIERMAN, J. H.	THESIS UTRECHT (1937).	EMISS.
KEY, J.	THESIS UTRECHT (1937).	EMISS., REL.
SCHWARZ, K. H.	PHYSICA 2, 361-368 (1940).	EMISS.
ROZHDESTVENSKII, D. S. & PENKIN, N. P.	IZVEST. AKAD. NAUK S.S.S.R. SER. FIZ. 5, 97-101 (1941) (O.T.P. 1).	HOOK, REL.
ROZHDESTVENSKII, D. S. & PENKIN, N. P.	J. PHYS. (U.S.S.R.) 5, 319-337 (1941).	HOOK, REL. & COMM.
BIERMANN, L.	PHYSIK. Z. 44, 232-233 (1943).	SCF
BIERMANN, L.	Z. ASTROPHYS. 22, 157-164 (1943).	SCF
BIERMANN, L.	NACHR. AKAD. WISS. GÖTTINGEN, MATH-PHYSIK. KL. 116-118 (1946-1948).	SCF
BIERMANN, L. & LÜBECK, K.	Z. ASTROPHYS. 25, 325-339 (1948).	SCF
MISHRA, B.	PHYS. REV. 72, 153 (1950).	SCF
STEPHENSON, G.	NATURE 162, 112 (1951).	MISC.
STEPHENSON, G.	PROC. PHYS. SOC. LONDON A 64, 458-464 (1951).	MISC.
VILLARS, D. S.	J. OPT. SOC. AM. 42, 552-558 (1952).	SCF
VAINSHTEIN, L. A. YAVORSKII, B. M.	ZHUR. EKSPTL. I TEORET. FIZ. 22, 712-718 (1954) (SLA transl. RT-3363).	SCF
YANOUGH, F.	VESTNIK LENINGRAD UNIV. SER. FIZ. I KHIM. 10, 135-142 (1955) (O.T.P. 2).	QUANT., REL.
BERSUKER, I. B.	SOVIET PHYS. - DOKLADY 2, 167-169 (1957).	SCF & ESTIM.
HINNOV, E. & KOHN, H.	J. OPT. SOC. AM. 47, 156-162 (1957).	EMISS.
RITTER, G. J. & SERIES, G. W.	PROC. ROY. SOC. LONDON A 238, 473-488 (1956-1957).	MISC.
VARSAVSKY, C. M.	THESIS HARVARD (1958).	QUANT.
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HOUZIAUX, L. & SAOONE, M. P.	BULL. SOC. ROY. SCI. LIEGE <u>30</u> , 287-299 (1961).	CA
NAQVI, A. M.	GEOPHYSICS CORPORATION OF AMERICA TECHNICAL REPORT 61-21-A; ASTIA DOCUMENT 263 459 (1961).	CA
OSTROVSKII, YU. I. & PENKIN, N. P.	OPTICS AND SPECTROSCOPY (U.S.S.R.) <u>12</u> , 379 (1962).	HOOK
VAINSHTEIN, L. A.	TRANSACTIONS OF THE P.N. LEBEOEV PHYSICS INSTITUTE <u>15</u> , PART 1, 1-50 (1962) (CBE-TR).	QUANT.
FELOMAN, P. & NOVICK, R.	PHYS. REV. <u>11</u> , 278-281 (1963).	LIFE
KUNIN, P., TAKSAR, I., SHILTERE, M. & SHILTER, E.	IZVESTIYA AKADEMII I NAUK LATIVSKOI S.S.R. #B 57-62 (1963).	QUANT.
NAQVI, A. M.	CONFERENCE ON OPACITY, ALBUQUERQUE, N.M., APRIL 8 & 9, GEOPHYSICS CORPORATION OF AMERICA, BEAUFORD, MASSACHUSETTS.	QUANT.
ANDERSON, E. M. & ZILITIS, V. A.	OPTICS AND SPECTROSCOPY (U.S.S.R.) <u>16</u> , 99-101 (1964).	QUANT.
NAQVI, A. M.	J. QUANT. SPECTROSC. RADIAT. TRANSFER <u>4</u> , 597-615 (1964).	QUANT.
HERTZBERG, M. & HOLLAND, R.	J. QUANT. SPECTROSC. RADIAT. TRANSFER <u>5</u> , 313-320 (1965).	EMISS., REL.
STEWART, J. C. & ROTENBERG, M.	PHYS. REV. <u>140</u> , 1508A-1519A (1965).	QUANT.

K III

BAGUS, P. S.	U. S. ATOMIC ENERGY COMMISSION ANL-6959 (1964).	SCF
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K IV

OSTERBROCK, D. E.	ASTROPHYS. J. <u>114</u> , 469-472 (1951).	QUANT. FORB.
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K VI

OSTERBROCK, D. E.	ASTROPHYS. J. <u>114</u> , 469-472 (1951).	QUANT. FORB.
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K VII

NIKITIN, A. A. & YAKUBOVSKII, O. A.	SOVIET PHYS.-DOKLAADY <u>9</u> , 409-411 (1964).	QUANT. FORB.
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KR (KRYPTON)*

KR I

PETERSEN, R.	PHYS. & CHEM. SOLIDS <u>1</u> , 284 (1957).	QUANT., REL.
GARTON, W. R. S., PERY, A. & CODLING, K.	"PROCEEDINGS FOURTH INTERNATIONAL CONFERENCE ON IONIZATION PHENOMENA IN GASES" 206-209 (ED. NILSSON, N. R., NORTH-HOLLAND PUBLISHING CO., AMSTERDAM, 1960).	ABSORPT.
PERY-THORNE, A. & GARTON, W. R. S.	PROC. PHYS. SOC. LONDON A <u>76</u> , 833-843 (1960).	ABSORPT.
COOPER, J. W.	PHYS. REV. <u>128</u> , 681-693 (1962).	QUANT.
HUFFMAN, R. E., TANAKA, Y. & LARRABEE, J. C.	APPLIED OPTICS <u>2</u> , 947-953 (1963).	ABSORPT.
PERY-THORNE, A. & CHAMBERLAIN, J. E.	PROC. PHYS. SOC. LONDON A <u>82</u> , 133-141 (1963).	HOOK.
STATZ, H., TANG, C. L. & KOSTER, G. F.	J. APPL. PHYS. <u>34</u> , 2625-2632 (1963).	QUANT., REL.
FAUST, W. L. & MCFARLANE, R. A.	J. APPL. PHYS. <u>35</u> , 2010-2015 (1964).	QUANT., REL.
FRIEDRICHS, H.	J. ASTROPHYS. <u>60</u> , 176-183 (1964).	EMISS.
MALAKHOV, V. P.	IZVESTIIA UYSSHIKH UCHEBNYKH ZAVEDENII FIZIKA <u>8</u> , 180 (1965).	INCOMPL.
WILKINSON, P. G.	J. QUANT. SPECTROSC. RADIAT. TRANSFER <u>5</u> , 503-510 (1965).	ABSORPT.

KR III

OSTERBROCK, D. E.	ASTROPHYS. J. <u>114</u> , 469-472 (1951).	QUANT. FORB.
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LA (LANTHANUM)*

LA II

BOYARCHUK, M. E. & BOYARCHUK, A. A.	AKADEMIIA NAUK S.S.S.R. KRYMSKAIA ASTROFIZICHESKAIA OBSERVATORIIA. IZVESTIIA <u>22</u> , 234-256 (1960) (O.T.P. 1).	COMM.
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LI (LITHIUM)*

Li I

KERSCHBAUM, H.	SITZBER. MATH.-PHYSIK. KL. BAYER. AKAD. WISS. MÜNCHEN, 19-25 (1926).	CANAL
KERSCHBAUM, H.	ANN. PHYSIK <u>29</u> , 465-488 (1926).	CANAL
TRUMPY, B.	Z. PHYSIK <u>44</u> , 575-584 (1927).	ABSORPT., REL.
TRUMPY, B.	Z. PHYSIK <u>50</u> , 228-233 (1928).	QUANT.
HARGREAVES, J.	PROC. CAMBRIDGE PHIL. SOC. <u>25</u> , 75-96 (1929).	SCF, REL.
TRUMPY, B.	Z. PHYSIK <u>52</u> , 787-796 (1929).	ABSORPT., REL. & COMM.
STEVENSON, A. F.	PROC. ROY. SOC. LONDON A <u>128</u> , 591-599 (1930).	QUANT. FORB.
TRUMPY, B.	Z. PHYSIK <u>61</u> , 54-60 (1930).	SCF
TRUMPY, B.	Z. PHYSIK <u>66</u> , 720 (1930).	COMM.
FILIPPOV, A. N.	Z. PHYSIK <u>69</u> , 526-547 (1931).	HOOK, REL.
FILIPPOV, A. N.	ZHUR. EKSPTL. I TEORET. FIZ. <u>2</u> , 24-41 (1932) (O.T.P. 1).	HOOK, REL.
FILIPPOV, A. N.	TRUDY GOSUDARST. OPT. INST. LENINGRAD <u>8</u> , #85 1-118 (1932) (O.T.P. 2).	HOOK, REL. COMM.
FOCK, V. & PETRASHEN, M.	PHYSIK. Z. SOWJETUNION <u>8</u> , 547-561 (1935).	SCF
KEY, J.	THESIS UTRECHT (1937).	EMISS., REL.
BATES, D. R. & DAMGAARD, A.	PHIL. TRANS. ROY. SOC. LONDON. SER. A. <u>242</u> , 101-122 (1949).	SCF
VESELOV, M. G.	ZHUR. EKSPTL. I TEORET. FIZ. <u>19</u> , 959-964 (1949) (ATS transl.).	QUANT.
STEPHENSON, G.	NATURE <u>167</u> , 156 (1951).	ABSORPT.
VAINShteIN, L. A. & YAVORSKII, B. M.	DOKLADY AKAD. NAUK S.S.S.R. <u>82</u> , 919-922 (1952) (O.T.P. 1).	QUANT.
VAINShteIN, L. A. & YAVORSKII, B. M.	ZHUR. EKSPTL. I TEORET. FIZ. <u>22</u> , 712-718 (1954) (SLA transl. RT-3363).	SCF & QUANT.
HINNOV, E. & KOHN, H.	J. OPT. SOC. AM. <u>42</u> , 156-162 (1957).	EMISS.
DRONOV, A. P., SVIRIDOV, A. G. & SOBOLEV, N. N.	OPTIKA I SPEKTROSKOPIYA <u>5</u> , 490-499 (1958) (transl. JOHNS HOPKINS APL LIBRARY BULLETIN TG230-T159).	EMISS., REL.
VARSAVSKY, C. M.	THESIS HARVARD (1958).	QUANT.
HEAVENS, O. S.	J. OPT. SOC. AM. <u>51</u> , 1058-1061 (1961).	CA
NAQVI, A. M.	GEOPHYSICS CORPORATION OF AMERICA TECHNICAL REPORT 61-21-A; ASTIA Document 263 459 (1961).	CA
KANTSERIAVICHUS, A.	LITOVSKII FIZICHESKII SBORNIK <u>2</u> , 245-257 (1962).	QUANT.
VASIN, B. L., LESKOV, L. V. & SAVIN, F. A.	FIZ. PROBL. SPEKTROSKOPII, AKAD. NAUK S.S.S.R., MATERIALY 13-Go (TRINADTSATAGO) SOVESHCH., LENINGRAD 39-41 (1962).	LIFE
ANDERSON, E. M. & ZILITIS, V. A.	OPTICS AND SPECTROSCOPY (U.S.S.R.) <u>16</u> , 211-214 (1963).	QUANT.

*SEE ALSO TABLE 1.

AUTHOR	JOURNAL	CLASSIFICATION
COHEN, M. & DALGARNO, A.	PROC. ROY. SOC. LONDON A <u>275</u> , 492-503 (1963).	QUANT.
FELDMAN, P. & NOVICK, R.	PHYS. REV. <u>11</u> , 278-281 (1963).	LIFE
FLANNERY, M. R. & STEWART, A. L.	MONTHLY NOTICES ROY. ASTRON. SOC. <u>126</u> , 387-392 (1963).	QUANT.
KUNIN, P., TAKSAR, I., SHILTERE, M. & SHILTER, E.	IZVESTIIA AKADEMII NAUK LATIVSKOI S.S.R. #8 57-62 (1963).	QUANT.
NAQVI, A. M.	CONFERENCE ON OPACITY, ALBUQUERQUE, N.M., APRIL 8 & 9, GEOPHYSICS CORPORATION OF AMERICA, BEDFORD, MASSACHUSETTS.	QUANT.
VETCHINKIN, S. I.	OPTICS AND SPECTROSCOPY (U.S.S.R.) <u>14</u> , 169-171 (1963).	QUANT.
WEISS, A. W.	ASTROPHYS. J. <u>138</u> , 1262-1276 (1963).	SCF
IVANOVA, A. V. & IVANOVA, A. N.	OPTICS AND SPECTROSCOPY (U.S.S.R.) <u>16</u> , 499-502 (1964).	SCF
NAQVI, A. M.	J. QUANT. SPECTROSC. RADIAT. TRANSFER <u>4</u> , 597-615 (1964).	QUANT.
STEWART, J. C. & ROTENBERG, M.	PHYS. REV. <u>140</u> , 1508A-1519A (1965).	QUANT.

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VESELOV, M. G.	ZHUR. EKSP. I TEORET. FIZ. <u>12</u> , 959-964 (1949) (ATS transl.).	QUANT.
VESELOV, M. G.	VESTNIK LENINGRAD UNIV. SER. FIZ. I KHIM. No. 8, 181-185 (1953) (O.T.P. 1).	QUANT.
YUTSIS, A. P., USHPALIS, K. K., KAVETSKIS, V. I. & LEVINSON, I. B.	OPTIKA I SPEKTROSKOPIYA <u>1</u> , 601-605 (1956) (O.T.P. 1).	QUANT.
USHPALIS, K. K., KUZMITSKITE, L. L. & BUDRITE, S. D.	TRUDY AKADEMII NAUK LITOVSKOI S.S.R. SERIJA B 3 (15) 47-53 (1958).	QUANT.
YUTSIS, A. P., VIZBARAITE, IA. I. & ERINGIS, K. K.	TRUDY AKADEMII NAUK LITOVSKOI S.S.R. SERIJA B 3 (26) 99-105 (1961) (O.T.P. 2).	QUANT.
KANTSERIAVICHUS, A.	LITOVSKII FIZICHESKII SBORNIK <u>2</u> , 245-257 (1962).	QUANT.
HELLIWELL, T. M.	THESIS CALIFORNIA INSTITUTE OF TECHNOLOGY (1963).	QUANT.
HELLIWELL, T. M.	PHYS. REV. <u>135</u> , A325-A331 (1964).	QUANT.

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Mg (MAGNESIUM)*

Mg I

PROKOF'EV, V. K.	Z. PHYSIK <u>50</u> , 701-715 (1928).	ESTIM.
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*SEE ALSO TABLE 1.

AUTHOR	JOURNAL	CLASSIFICATION
PROKOF'EV, V. K.	ZHUR. EKSPTL. I TEORET. FIZ. <u>1</u> , 111-122 (1931) (O.T.P. 1).	ESTIM.
RUSSELL, H. N.	ASTROPHYS. J. <u>28</u> , 239-297 (1933).	ESTIM.
RUBINSTEIN, P. J.	PHYS. REV. LETTERS <u>58</u> , 1007 (1940).	QUANT., REL.
KERSTEN, J. A. H.	THESIS UTRECHT (1941).	EMISS., REL.
KERSTEN, J. A. H. & ORNSTEIN, L. S.	PHYSICA <u>8</u> , 1124-1136 (1941).	EMISS., REL.
SCHUTTEVAER, J. W., DE BONT, M. J. & VAN OEN BROEK, TH. H.	PHYSICA <u>10</u> , 544-552 (1943).	EMISS., REL.
WILSON, O. C.	ASTROPHYS. J. <u>102</u> , 126-150 (1948).	MISC., REL.
BIERMANN, L. & TREFFTZ, E.	Z. ASTROPHYS. <u>26</u> , 213-239 (1949).	SCF
TREFFTZ, E.	Z. ASTROPHYS. <u>26</u> , 240-263 (1949).	SCF
TREFFTZ, E.	Z. ASTROPHYS. <u>28</u> , 67-78 (1950).	SCF
ALLER, L. H., HAZEN, W., DOHERTY, L., GRANT, G., JUGAKU, J., SPIEGEL, E. & WADDELL, J.	PUBLICATIONS OF THE OBSERVATORY, UNIV. OF MICHIGAN (FEB. 19, 1954).	MISC., REL.
ALLEN, C. W.	MONTHLY NOTICES ROY. ASTRON. SOC. <u>117</u> , 622-628 (1957).	EMISS. & CA
VAINSHTEIN, L. A.	OPTIKA I SPEKTROSKOPIYA <u>3</u> , 313-321 (1957) (TRANSL.).	QUANT.
BOLOT, G.	Z. PHYSIK <u>150</u> , 205-214 (1958).	ABSORPT.
OSTROVSKII, YU. I., PENKIN, N. P. & SHABANOVA, L. N.	BULL. ACAA. SCI. U.S.S.R. PHYS. SER. <u>22</u> , 720-724 (1958).	HOOK
OSTROVSKII, YU. I., PENKIN, N. P. & SHABANOVA, L. N.	SOVIET PHYS.-DOKLADY <u>3</u> , 538-540 (1958).	HOOK
VARSAVSKY, C. M.	THESIS HARVARD (1958).	QUANT.
AOOINK, N. W. H.	SPECTROCHIM. ACTA <u>15</u> , 349-359 (1959).	EMISS.
BOYARCHUK, M. E. & BOYARCHUK, A. A.	AKADEMIJA NAUK S.S.S.R. KRYMSKAJA ASTROFIZICHESKAJA OBSERVATORIIA. IZVESTIJA <u>22</u> , 234-256 (1960) (O.T.P. 1).	COMM.
GOLOBERG, L., MÜLLER, E. A. & ALLER, L. H.	ASTROPHYS. J. SUPPL. SER. <u>5</u> , #45, 1-137 (1960).	CA
BREHM, B., DEMTRÖDER, W. & OSBERGHAUS, O.	Z. NATURFORSCH. <u>16A</u> , 843 (1961).	LIFE
DEMTRÖDER, W.	THESIS BONN (1961).	LIFE
DEMTRÖDER, W.	Z. PHYSIK <u>166</u> , 42-55 (1962).	LIFE
GARSTANG, R. H.	J. OPT. SOC. AM. <u>52</u> , 845-851 (1962).	QUANT.
PENKIN, N. P. & SHABANOVA, L. N.	OPTICS AND SPECTROSCOPY (U.S.S.R.) <u>12</u> , 1-5 (1962).	HOOK, REL.
VAINSHTEIN, L. A.	TRANSACTIONS OF THE P.N. LEBEDEV PHYSICS INSTITUTE <u>15</u> , PART 1, 1-50 (1962) (CBE-TR).	QUANT.
VAINSHTEIN, L. A. & POLUEKTOV, I. A.	OPTICS AND SPECTROSCOPY (U.S.S.R.) <u>12</u> , 254-257 (1962).	QUANT., REL.

HELLIWELL, T. M.	THESIS CALIFORNIA INSTITUTE OF TECHNOLOGY (1963).	QUANT.
AARTS, J. & BOSCH, G.	PHYSICA <u>30</u> , 1673-1681 (1964).	EMISS.
HELLIWELL, T. M.	PHYS. REV. <u>135</u> , A325-A331 (1964).	QUANT.
LURIO, A.	PHYS. REV. <u>136</u> , A376-A379 (1964).	MISC.
PENKIN, N. P. & SHABANOVA, L. N.	OPTICS AND SPECTROSCOPY (U.S.S.R.) <u>18</u> , 535-537 (1965).	COMM.

Mg II

RUSSELL, H. N.	ASTROPHYS. J. <u>28</u> , 239-297 (1933).	ESTIM.
BIERMANN, L.	PHYSIK. Z. <u>44</u> , 232-233 (1943).	SCF
BIERMANN, L.	Z. ASTROPHYS. <u>22</u> , 157-164 (1943).	SCF
BIERMANN, L.	NACHR. AKAD. WISS. GÖTTINGEN, MATH-PHYSIK. KL. 116-118 (1946-1948).	SCF
BIERMANN, L. & LÜBECK, K.	Z. ASTROPHYS. <u>25</u> , 325-339 (1948).	SCF
ALLER, L. H., HAZEN, M., DOHERTY, L., GRANT, G., JUGAKU, J., SPIEGEL, E. & WADDELL, J.	PUBLICATIONS OF THE OBSERVATORY, UNIV. OF MICHIGAN (FEB. 19, 1954).	MISC., REL.
NAGIBINA, I. M.	BULL. ACAD. SCI. U.S.S.R. PHYS. SER. <u>22</u> , 678-679 (1958).	EMISS., REL.
VARSAVSKY, C. M.	THESIS HARVARD (1958).	QUANT.
BOYARCHUK, M. E. & BOYARCHUK, A. A.	AKADEMIIA NAUK S.S.S.R. KRYMSKAIA ASTROFIZICHESKAIA OBSERVATORIIA. IZVESTIIA <u>22</u> , 234-256 (1960) (O.T.P. 1).	COMM.
ROBERTS, T. G. & HALES, W. L.	U. S. ARMY MISSILE COMMAND REDSTONE ARSENAL, ALABAMA, REPORT NO. RR-TR-62-8 (1962).	CA
BIALAS-ZABAWA, A., SKULSKA, E. & WALACH, Z.	ACTA PHYS. POLON. <u>26</u> , 175-183 (1964).	QUANT., REL.
DE GROOT, M. & UNDERHILL, A. B.	BULLETIN ASTRONOMICAL INSTITUTES NETHERLANDS <u>12</u> , 280-292 (1964).	MISC.
STEWART, J. C. & ROTENBERG, M.	PHYS. REV. <u>140</u> , 1508A-1519A (1965).	QUANT.

Mg V

BOLOTIN, A. B., SHIRONAS, I. I. & BRAIMAN, M. YU.	VILNIUS VALSTYBINIO V. KAPSUKO VARDU UNIVERSITETO MOKSLO DARBAI <u>33</u> , MATEMATIKA FIZIKA <u>2</u> , 107-112 (1960).	QUANT.
OSTERBROCK, D. E.	ASTROPHYS. J. <u>142</u> , 1423-1430 (1965).	QUANT. FORB.

Mg VIII

NIKITIN, A. A. & YAKUBOVSKII, O. A.	SOVIET PHYS.-DOKLADY <u>2</u> , 409-411 (1964).	QUANT. FORB.
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Mn (MANGANESE)*

Mn I

FRERICHS, R.	ANN. PHYSIK <u>81</u> , 807-845 (1926).	EMISS., REL.
SEWARD, R. S.	PHYS. REV. <u>32</u> , 344-361 (1931).	EMISS., REL.
HULDT, L. & LAGERQVIST, A.	ARKIV FYSIK <u>5</u> , 91-95 (1951).	EMISS.
HULOT, L. & LAGERQVIST, A.	J. OPT. SOC. AM. <u>42</u> , 142 (1952).	EMISS.
BELL, G. D.	THESIS CALIFORNIA INSTITUTE OF TECHNOLOGY (1956-1957).	ABSORPT.
NIKONOVA, E. I. & PROKOF'EV, V. K.	OPTIKA I SPEKTROSKOPIYA <u>1</u> , 290-297 (1956) (TRANSL.).	HOOK, REL.
OSTROVSKII, YU. I., PARCHEVSKII, G. F. & PENKIN, N. P.	OPTIKA I SPEKTROSKOPIYA <u>1</u> , 821-832 (1956) (OTS TRANSL. 62 15508) (AD 266 653).	HOOK REL.
ALLEN, C. W. & ASAAO, A. S.	MONTHLY NOTICES ROY. ASTRON. SOC. <u>112</u> , 36-49 (1957).	EMISS.
BELL, G. D.	ASTRON. J. <u>62</u> , 7 (1957).	COMM.
HINNOV, E. & KOHN, H.	J. OPT. SOC. AM. <u>42</u> , 156-162 (1957).	EMISS.
OSTROVSKII, YU. I. & PENKIN, N. P.	OPTIKA I SPEKTROSKOPIYA <u>3</u> , 193-201 (1957) (O.T.P.1) (AD 266 652).	HOOK
DVORNIKOVA, I. U. & NAGIBINA, I. M.	OPTIKA I SPEKTROSKOPIYA <u>4</u> , 421-429 (1958) (O.T.P.2).	EMISS., REL.
NAGIBINA, I. M.	OPTIKA I SPEKTROSKOPIYA <u>4</u> , 430-437 (1958) (O.T.P.2).	EMISS., REL.
AOOINK, N. W. H.	SPECTROCHIM. ACTA <u>15</u> , 349-359 (1959).	EMISS.
BELL, G. D., DAVIS, M. H., KING, R. B. & ROUTLY, P. M.	ASTROPHYS. J. <u>129</u> , 437-440 (1959).	ABSORPT.
ALLEN, C. W.	MONTHLY NOTICES ROY. ASTRON. SOC. <u>121</u> , 299-332 (1960).	COMM. & CA
BOYARCHUK, M. E. & BOYARCHUK, A. A.	AKADEMIIA NAUK S.S.S.R. KRYMSKAIA ASTROFIZECHESKAIA OBSERVATORIIA. IZVESTIIA <u>22</u> , 234-256 (1960) (O.T.P. 1).	COMM.
KOROLEV, F. A. & KVARATSKHELI, YU. K.	OPTICS AND SPECTROSCOPY (U.S.S.R.) <u>10</u> , 200-202 (1961).	EMISS., REL.
KOROLEV, F. A. & KVARATSKHELI, Iu. K.	FIZ. PROBL. SPEKTROSKOPII, AKAO. NAUK S.S.S.R. MATERIALY 13-GO (TRINAOTSATAGO) SOVESHCH. LENINGRAO 109-111 (1962).	EMISS., REL.
HEFFERLIN, R. & GEARHART, J.	J. QUANT. SPECTROSC. RADIAT. TRANSFER <u>4</u> , 9-28 (1964).	EMISS.
MOROZOVA, N. P. & STARTSEV, G. P.	OPTICS AND SPECTROSCOPY (U.S.S.R.) <u>12</u> , 174-176 (1964).	EMISS.

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STEWART, J. C. & ROTENBERG, M.

PHYS. REV. 140, 1508A-1519A (1965).

QUANT.

Mn II

SEWARD, R. S.

PHYS. REV. 32, 344-361 (1931).

EMISS., REL.

WILSON, O. C.

ASTROPHYS. J. 102, 126-150 (1948).

MISC., REL.

NAGIBINA, I. M.

BULL. ACAD. SCI. U.S.S.R. PHYS. SER. 22, 678-679
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EMISS., REL.

BOYARCHUK, M. E. & BOYARCHUK,
A. A.AKADEMIJA NAUK S.S.S.R. KRYMSKAJA ASTROFIZICHESKAJA
OBSERVATORIIA. IZVESTIIA 22, 234-256 (1960)
(O.T.P. 1).

COMM.

ALLER, L. H.

UNIV. OF MICHIGAN, DEPT. OF ASTRONOMY TECHNICAL
NOTE #3 (1962).

MISC., REL.

Mn III

ZHIVRONAITE, S. A.,
KONSTANTINAVICHUS, K. V.,
& RAKAUSKAS, R. I.LITOVSKII FIZICHESKII SBORNIK 2, 17-31 (1962).

SCF

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Mo (MOLYBDENUM)*

Mo I

NIKONOVA, E. I. & PROKOF'EV,
V. K.OPTIKA I SPEKTROSKOPIYA 1, 290-297 (1956)
(TRANSL.).

HOOK, REL.

DICKERMAN, P. J. & DEUEL, R. W.

J. QUANT. SPECTROSC. RADIAT. TRANSFER 4, 807-817
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EMISS., REL.

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N (NITROGEN)*

N I

PETRIE, W.

J. GEOPHYS. RESEARCH 55, 143-151 (1950).

QUANT.

UFFORD, C. W. & GILMOUR, R. M.

ASTROPHYS. J. 111, 580-581 (1950).QUANT. FORB.,
REL.

GARSTANG, R. H.

ASTROPHYS. J. 115, 506-508 (1952).

QUANT. FORB.

*SEE ALSO TABLE 1.

AUTHOR	JOURNAL	CLASSIFICATION
MOTSCHMANN, H.	Z. PHYSIK <u>143</u> , 77-92 (1955).	EMISS.
GARSTANG, R. H.	"THE AIRGLOW & THE AURORAE", 324-327 (EO. ARMSTRONG & DALGARNO, PERGAMON PRESS, NEW YORK, 1956).	QUANT. FORB.
LEVINSON, I. B., BOLOTIN, A. B. & LEVIN, L. I.	TRUOY VIL'NYUSSKOGO UN. 5, 49-55 (1956) (TRANSL.).	QUANT.
VARSAVSKY, C. M.	THESIS HARVARO (1958).	QUANT.
YUTSIS, A. P. & VIZBARAITE, IA. I.	TRUOY AKADEMII NAUK LITOVSKOI S.S.R., SERIJA B, 1 (17) 3-15 (1959).	QUANT. FORB.
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NORMAN, G. E.	OPTICS AND SPECTROSCOPY (U.S.S.R.) <u>14</u> , 315-317 (1963).	QUANT.
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STEWART, J. C. & ROTENBERG, M.	PHYS. REV. <u>140</u> , 1508A-1519A (1965).	QUANT.
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GARSTANG, R. H.	MONTHLY NOTICES ROY. ASTRON. SOC. <u>111</u> , 115-124 (1951).	QUANT. FORB.
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MANDEL'SHTAM, S. L. & SUKHODREV, N. K.	ZHUR. EKSPIT. I TEORET. FIZ. <u>24</u> , 701-707 (1953).	INCOMPL.
YILMAZ, H.	PHYS. REV. <u>100</u> , 1148-1153 (1955).	QUANT. FORB.
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MASTRUP, F. & WIESE, W.	Z. ASTROPHYS. <u>44</u> , 259-279 (1958).	EMISS. REL.
VARSAVSKY, C. M.	THESIS HARVARD (1958).	QUANT.
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JUGAKU, J., SARGENT, L. W. & GREENSTEIN, J. L.	ASTROPHYS. J. <u>134</u> , 783-796 (1961).	CA
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KELLY, P. S.	J. QUANT. SPECTROSC. RADIAT. TRANSFER <u>4</u> , 117-148 (1964).	QUANT.
KELLY, P. S., SOKOLOFF, J. & ARMSTRONG, B. H.	TECHNICAL REPORT NO. WL TR-64-172 (1965).	QUANT.

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LAWRENCE, G. M. & SAVAGE, B. D.	PHYS. REV. <u>141</u> , 67-70 (1966).	LIFE
OSTERBROCK, D. E.	ASTROPHYS. J. <u>142</u> , 1423-1430 (1965).	QUANT. FORB.

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ALLER, L. H.	ASTROPHYS. J. <u>92</u> , 135-165 (1943).	QUANT.
VAINSHTEIN, L. A. & YAVORSKII, B. M.	DOKLADY AKAO. NAUK S.S.S.R. <u>87</u> , 919-922 (1952) (O.T.P. 1).	QUANT.
BOLOTIN, A. B. & YUTSIS, A. P.	ZHUR. EKSPTL. I TEORET. FIZ. <u>24</u> , 537-543 (1953) (O.T.P. 1).	QUANT.
MANDEL'SHTAM, S. L. & SUKHOOREV, N. K.	ZHUR. EKSPTL. I TEORET. FIZ. <u>24</u> , 701-707 (1953).	INCOMPL.
GAUSTAO, J. E. & SPITZER, JR., L.	ASTROPHYS. J. <u>134</u> , 771-776 (1961).	ESTIM.
NIKITIN, A. A.	VESTNIK LENINGRAD UNIV. SER. MAT. MEKH. I ASTRON. SERIES 3, #13, 113-137 (1962) (O.T.P. 2).	QUANT.
NIKITIN, A. A. & YAKUBOVSKII, O. A.	SOVIET ASTRONOMY-AJ <u>2</u> , 189-198 (1963).	QUANT.
COHEN, M. & DALGARNO, A.	PROC. ROY. SOC. LONDON A <u>280</u> , 258-270 (1964).	QUANT.
KELLY, P. S.	ASTROPHYS. J. <u>140</u> , 1247-1268 (1964).	SCF
KELLY, P. S.	J. QUANT. SPECTROSC. RADIAT. TRANSFER <u>4</u> , 117-148 (1964).	QUANT.
NIKITIN, A. A. & YAKUBOVSKII, O. A.	SOVIET PHYS.-DOKLADY <u>9</u> , 409-411 (1964).	QUANT. FORB.
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STEWART, J. C. & ROTENBERG, M.	PHYS. REV. <u>140</u> , 1508A-1519A (1965).	QUANT.
OSTERBROCK, D. E.	ASTROPHYS. J. <u>142</u> , 1423-1430 (1965).	QUANT. FORB.

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ALLER, L. H.	ASTROPHYS. J. <u>92</u> , 135-165 (1943).	QUANT.
BOLOTIN, A. B. & YUTSIS, A. P.	ZHUR. EKSPTL. I TEORET. FIZ. <u>24</u> , 537-543 (1953) (O.T.P. 1).	QUANT.
COHEN, M. & DALGARNO, A.	PROC. ROY. SOC. LONDON A <u>280</u> , 258-270 (1964).	QUANT.
KELLY, P. S.	ASTROPHYS. J. <u>140</u> , 1247-1268 (1964).	SCF
KELLY, P. S.	J. QUANT. SPECTROSC. RADIAT. TRANSFER <u>4</u> , 117-148 (1964).	QUANT.
KELLY, P. S., SOKOLOFF, J. & ARMSTRONG, B. H.	TECHNICAL REPORT NO. WL TR-64-172 (1965).	QUANT.
PFENNIG, H., STEELE, P. & TREFFTZ, E.	J. QUANT. SPECTROSC. RADIAT. TRANSFER <u>5</u> , 355-347 (1965).	SCF

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KANTSERIAVICHUS, A.	LITOVSKII FIZICHESKII SBORNIK 2, 245-257 (1962).	QUANT.
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FLANNERY, M. R. & STEWART, A. L.	MONTHLY NOTICES ROY. ASTRON. SOC. 126, 387-392 (1963).	QUANT.
KUNIN, P., TAKSAR, I., SHILTERE, M. & SHILTER, E.	IZVESTIIA AKADEMI I NAUK LATIVSKOI S.S.R. #8 57-62 (1963).	QUANT.
WEISS, A. W.	ASTROPHYS. J. 138, 1262-1276 (1963).	SCF
COHEN, M. & DALGARNO, A.	PROC. ROY. SOC. LONDON A 280, 258-270 (1964).	QUANT.
KELLY, P. S.	ASTROPHYS. J. 140, 1247-1268 (1964).	SCF
KELLY, P. S.	J. QUANT. SPECTROSC. RADIAT. TRANSFER 4, 117-148 (1964).	QUANT.
BERKNER, K. H., COOPER III, W. S., KAPLAN, S. N. & PYLE, R. V.	PHYS. LETTERS 16, 35-36 (1965).	LIFE
KELLY, P. S., SOKOLOFF, J. & ARMSTRONG, B. H.	TECHNICAL REPORT No. WL TR-64-172 (1965).	QUANT.

N VI

KANTSERIAVICHUS, A.	LITOVSKII FIZICHESKII SBORNIK 2, 245-257 (1962).	QUANT.
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NA (SODIUM)*

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LADENBURG, R. & MINKOWSKI, R.	Z. PHYSIK 6, 153-164 (1921).	MISC.
MINKOWSKI, R.	THESIS BRESLAU (1921).	MISC.
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THOMAS, W.	Z. PHYSIK 24, 169-196 (1924).	ESTIM.
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KERSCHBAUM, H.	ANN. PHYSIK 72, 465-488 (1926).	CANAL

*SEE ALSO TABLE 1.

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MINKOWSKI, R.	Z. PHYSIK <u>36</u> , 839-858 (1926).	ABSORPT.
SUGIURA, Y.	PHIL. MAG. <u>4</u> , 495-504 (1927).	QUANT.
TRUMPY, B.	Z. PHYSIK <u>42</u> , 327-328 (1927).	COMM.
TRUMPY, B.	KGL. NORSKE VIOENSKAB. SELSKABS, SKRIFTER <u>1</u> , 1-80 (1927).	ABSORPT.
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HUPFELD, H.	Z. PHYSIK <u>54</u> , 484-497 (1929).	LIFE
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LADENBURG, R. & THIELE, E.	Z. PHYSIK <u>72</u> , 697-699 (1931).	COMM.
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WEINGEROFF, M.	Z. PHYSIK <u>67</u> , 679-698 (1931).	MISC.
ZEOHEN, W.	NATURWISSENSCHAFTEN <u>19</u> , 826-827 (1931).	ABSORPT.
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FOCK, V.	Z. PHYSIK <u>89</u> , 744-749 (1934).	COMM.
ORNSTEIN, L. S. & KEY, J.	PHYSICA <u>1</u> , 945-952 (1934).	EMISS., REL.
FOCK, V. & PETRASHEN, M.	PHYSIK. Z. SOWJETUNION <u>8</u> , 547-561 (1935).	SCF
MINKOWSKI, R. & WEBER- SCHÄFER, M.	Z. PHYSIK <u>94</u> , 172-175 (1935).	COMM.
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ROZHDESTVENSKII, D. S. & PENKIN, N. P.	J. PHYS. (U.S.S.R.) <u>5</u> , 319-337 (1941).	HOOK, REL. & COMM.
ROZHDESTVENSKII, D. S. & PENKIN, N. P.	IZVEST. AKAD. NAUK S.S.S.R. SER. FIZ. <u>5</u> , 97-101 (1941) (O.T.P. 1).	HOOK, REL.
BIERMANN, L.	Z. ASTROPHYS. <u>22</u> , 157-164 (1943).	SCF
BIERMANN, L.	PHYSIK. Z. <u>44</u> , 232-233 (1943).	SCF
PAUL, W.	Z. PHYSIK <u>124</u> , 121-128 (1944).	MISC.
KVATER, G. S.	IZVEST. AKAD. NAUK S.S.S.R. SER. FIZ. <u>2</u> , 236-237 (1945) (O.T.P. 1).	HOOK
BIERMANN, L.	NACHR. AKAD. WISS. GÖTTINGEN, MATH-PHYSIK. KL. 116-118 (1946-1948).	SCF
DUPUY, G.	COMPT. REND. <u>222</u> , 654-656 (1946) (TRANSL.).	COMM.
KVATER, G. S.	VESTNIK Leningrad Univ. SER. FIZ. I KHIM. NO. 2, 135-141 (1947) (O.T.P. 1).	HOOK
BIERMANN, L. & LÜBECK, K.	Z. ASTROPHYS. <u>25</u> , 325-339 (1948).	SCF
BATES, D. R. & DAMGAARD, A.	PHIL. TRANS. ROY. SOC. LONDON. SER. A. <u>242</u> , 101-122 (1949).	CA & SCF
SEATON, M. J.	PROC. ROY. SOC. LONDON A <u>208</u> , 418-430 (1951).	COMM.
STEPHENSON, G.	NATURE <u>167</u> , 112 (1951).	MISC.
STEPHENSON, G.	PROC. PHYS. SOC. LONDON A <u>64</u> , 458-464 (1951).	MISC.
VAINSHTAIN, L. A. & YAVORSKII, B. M.	DOKLADY AKAD. NAUK S.S.S.R. <u>82</u> , 919-922 (1952) (O.T.P. 1).	QUANT.
PETRASHEN, M. I. & ABARENKOV, I. V.	VESTNIK Leningrad Univ. SER. FIZ. I KHIM. NO. 5, 141-148 (1954) (O.T.P. 2).	QUANT.
VAINSHTAIN, L. A. & YAVORSKII, B. M.	ZHUR. EKSPTL. I TEORET. FIZ. <u>27</u> , 712-718 (1954) (SLA transl. RT-3363).	SCF & QUANT.
YANOUGH, F.	VESTNIK Leningrad Univ. SER. FIZ. I KHIM. <u>10</u> , 135-142 (1955) (O.T.P. 2).	QUANT. REL.
ANDERSON, E. M., BUSHKA, Z. A., GRINBERG, R. O. & SAULGOZHA, A. K.	VESTNIK Leningrad Univ. SER. FIZ. I KHIM. NO. 4, 27-31 (1956) (O.T.P. 1).	QUANT.
BERSUKER, I. B.	SOVIET PHYS. - DOKLADY <u>2</u> , 167-169 (1957).	SCF & ESTIM.
HINNOV, E. & KOHN, H.	J. OPT. SOC. AM. <u>42</u> , 156-162 (1957).	EMISS.
VAINSHTAIN, L. A.	OPTIKA I SPEKTROSKOPIYA <u>3</u> , 313-321 (1957) (TRANSL.).	QUANT.
BERSUKER, I. B.	BULL. ACAD. SCI. U.S.S.R. PHYS. SER. <u>22</u> , 743-746 (1958).	SCF
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KRÜGER, H. & SCHEFFLER, K.	J. PHYS. RADIUM <u>19</u> , 854-857 (1958).	MISC.
VARSAVSKY, C. M.	THESIS HARVARD (1958).	QUANT.
ADOINK, N. W. H.	SPECTROCHIM. ACTA <u>15</u> , 349-359 (1959).	EMISS.
ARCHAMBAULT, Y., DESCOUTES, J., PRIOU, M., OMONT, A. & PEBAY- PEYROULA, J.	J. PHYS. RADIUM <u>21</u> , 677-679 (1959).	MISC.
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BREHM, B., DEMTRÖDER, W. & OSBERGHAUS, O.	Z. NATURFORSCH. <u>16A</u> , 843 (1961).	LIFE
DEMTRÖDER, W.	THESIS BONN (1961).	LIFE
HEAVENS, O. S.	J. OPT. SOC. AM. <u>51</u> , 1058-1061 (1961).	CA
HOUZIAUX, L. & SAOONE, M. P.	BULL. SOC. ROY. SCI. LIEGE <u>30</u> , 287-299 (1961).	CA
NAQVI, A. M.	GEOPHYSICS CORPORATION OF AMERICA TECHNICAL REPORT 61-21-A; ASTIA DOCUMENT 263 459 (1961).	CA
OSTROVSKII, YU. I. & PENKIN, N. P.	OPTICS AND SPECTROSCOPY (U.S.S.R.) <u>11</u> , 1-5 (1961).	HOOK
DEMTRÖDER, W.	Z. PHYSIK <u>166</u> , 42-55 (1962).	LIFE
NIKONOVA, E. I., PROKOF'EV, V. K. & STARTSEV, G. P.	FIZ. PROBL. SPEKTROSKOPII, AKAD. NAUK S.S.S.R., MATERIALY 13-GO (TRINAOTSATAGO) SOVESHCH., LENINGRAD P. 51-54 (1962).	HOOK
OSTROVSKII, Iu. I. & PENKIN, N. P.	FIZ. PROBL. SPEKTROSKOPII, AKAD. NAUK S.S.S.R., MATERIALY 13-GO (TRINAOTSATAGO) SOVESHCH., LENINGRAD P. 54-57 (1962).	HOOK
VAINSHTEIN, L. A.	TRANSACTIONS OF THE P.N. LEBEOEV PHYSICS INSTITUTE <u>15</u> , PART 1, 1-50 (1962) (CBE-TR).	QUANT.
VASIN, B. L., LESKOV, L. V. & SAVIN, F. A.	FIZ. PROBL. SPEKTROSKOPII, AKAD. NAUK S.S.S.R., MATERIALY 13-GO (TRINAOTSATAGO) SOVESHCH., LENINGRAD 39-41 (1962).	LIFE
AGARBICEANU, I., KUKUREZIANU, I., POPESCU, I. & VASILIU, V.	OPTICS AND SPECTROSCOPY (U.S.S.R.) <u>14</u> , 8-10 (1963).	MISC.
KUNIN, P., TAKSAR, I., SHILTERE, M. & SHILTER, E.	IZVESTIYA AKADEMII I NAUK LATIVSKOI S.S.R. #B 57-62 (1963).	QUANT.
NAQVI, A. M.	CONFERENCE ON OPACITY, ALBUQUERQUE, N.M., APRIL 8 & 9, GEOPHYSICS CORPORATION OF AMERICA, BEDFORD, MASSACHUSETTS.	QUANT.
ANDERSON, E. M. & ZILITIS, V. A.	OPTICS AND SPECTROSCOPY (U.S.S.R.) <u>16</u> , 99-101 (1964).	QUANT.
HULPKE, E., PAUL, E. & PAUL, W.	Z. PHYSIK <u>177</u> , 257-268 (1964).	LIFE
MARKOVA, G. V. & CHAIKA, M. P.	OPTICS AND SPECTROSCOPY (U.S.S.R.) <u>12</u> , 170-173 (1964).	MISC.

AUTHOR	JOURNAL	CLASSIFICATION
NAQVI, A. M.	J. QUANT. SPECTROSC. RAOIAT. TRANSFER <u>4</u> , 597-615 (1964).	QUANT.
HERTZBERG, M. & HOLLANO, R.	J. QUANT. SPECTROSC. RAOIAT. TRANSFER <u>5</u> , 313-320 (1965).	EMISS., REL.
KARSTENSEN, F.	Z. PHYSIK <u>187</u> , 165-179 (1965).	LIFE
STEWART, J. C. & ROTENBERG, M.	PHYS. REV. <u>140</u> , 1508A-1519A (1965).	QUANT.
Na II		
PETERSEN, R.	PHYS. & CHEM. SOLIOS <u>1</u> , 284 (1957).	QUANT., REL.
Na IV		
BOLOTIN, A. B., SHIRONAS, I. I. & BRAIMAN, M. YU.	VILNIAUS VALSTYBINIO V. KAPSUKO VAROO UNIVERSITETO MOKSLO DARBAI <u>33</u> , MATEMATIKA FIZIKA <u>2</u> , 107-112 (1960).	QUANT.
Na VII		
NIKITIN, A. A. & YAKUBOVSKII, O. A.	SOVIET PHYS.-DOKLAOD <u>2</u> , 409-411 (1964).	QUANT. FORB.
* * * * *		
NE (NEON)*		
NE I		
LAOENBURG, R., KOPFERMANN, H. & CARST, A.	SITZBER. OEUT. AKAO. WISS. BERLIN, KL. MATH., PHYS. U TECH. No. 21, 255-273 (1926).	HOOK
KOPFERMANN, H. & LAOENBURG, R.	Z. PHYSIK <u>48</u> , 51-61 (1928).	HOOK
KOPFERMANN, H. & LAOENBURG, R.	Z. PHYSIK <u>65</u> , 167-188 (1930).	HOOK
LAOENBURG, R. & LEVY, S.	Z. PHYSIK <u>65</u> , 189-206 (1930).	HOOK, REL.
LADENBURG, R.	REV. MOO. PHYS. <u>5</u> , 243-256 (1933).	HOOK, HOOK, REL.
SCHÜTZ, W.	ANN. PHYSIK <u>18</u> , 705-720 (1933).	& COMM. MISC.
GRIFFITHS, J. H. E.	PROC. ROY. SOC. LONON A <u>143</u> , 588-604 (1934).	LIFE
LAOENBURG, R.	USPEKHI FIZ. NAUK <u>14</u> , 721-741 (1934).	HOOK, HOOK, REL. & COMM.
LAOENBURG, R. & LEVY, S.	Z. PHYSIK <u>88</u> , 461-468 (1934).	EMISS.

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SHORTLEY, G. H.	PHYS. REV. <u>47</u> , 295-300 (1935).	QUANT., REL. & COMM.
KREBS, K.	Z. PHYSIK <u>101</u> , 604-642 (1936).	ABSORPT., REL.
GARBUNY, M.	Z. PHYSIK <u>107</u> , 362-368 (1937).	EMISS., REL.
UFFORD, C. W.	ASTROPHYS. J. <u>85</u> , 249-250 (1937).	QUANT., REL.
PHELPS, A. V.	PHYS. REV. <u>100</u> , 1230 (1955).	LIFE
PETERSEN, R.	PHYS. & CHEM. SOLIDS <u>1</u> , 284 (1957).	QUANT., REL.
VARSAVSKY, C. M.	THESIS HARVARD (1958).	QUANT.
GOLD, A. & KNOX, R. S.	PHYS. REV. <u>113</u> , 834-839 (1959).	SCF
PHELPS, A. V.	PHYS. REV. <u>114</u> , 1011-1025 (1959).	COMM., REL.
OSHEROVICH, A. L. & PETELIN, G. M.	SOVIET PHYS. - DOKLADY <u>4</u> , 1289-1291 (1960).	LIFE
BENNETT, JR., W. R.	"INTERNATIONAL CONFERENCE ON QUANTUM ELECTRONICS," 2ND, 28-43 "ADVANCES IN QUANTUM ELECTRONICS" (ED. SINGER, J. R., COLUMBIA UNIVERSITY PRESS, NEW YORK 1961).	LIFE
DOHERTY, L. R.	THESIS MICHIGAN (1961).	EMISS.
FRISH, S. Z. & BOCHKOVA, O. P.	VESTNIK LENINGRAD UNIV. SER. FIZ. I KHIM. No. 16, 40-58 (1961) (O.T.P. 2).	EMISS., REL.
COOPER, J. W.	PHYS. REV. <u>128</u> , 681-693 (1962).	QUANT.
FRISH, S. Z. & BOCHKOVA, O. P.	FIZ. PROBL. SPEKTROSKOPII, AKAD. NAUK S.S.S.R., MATERIALY 13-GO (TRINADTSATAGO) SOVESHCH., LENINGRAD P. 142-145 (1962).	INCOMPL.
MCLEAN, E. A.	6TH INTERNATIONAL CONFERENCE ON IONIZATION PHENOMENA IN GASES PROCEEDINGS, PARIS <u>3</u> , 389-394 (1963).	EMISS.
PERY-THORNE, A. & CHAMBERLAIN, J. E.	PROC. PHYS. SOC. LONDON A <u>82</u> , 133-141 (1963).	HOOK.
STATZ, H., TANG, C. L. & KOSTER, G. F.	J. APPL. PHYS. <u>34</u> , 2625-2632 (1963).	QUANT., REL.
CORDOVER, R. H., SZÖKE, A. & JAVAN, A.	BULL. AM. PHY SOC. SERIES II VOL. <u>2</u> , 490 (1964).	LIFE
FAUST, W. L. & MCFARLANE, R. A.	J. APPL. PHYS. <u>35</u> , 2010-2015 (1964).	QUANT., REL.
FRIEDRICH, H.	J. ASTROPHYS. <u>60</u> , 176-183 (1964).	EMISS.
KELLY, P. S.	J. QUANT. SPECTROSC. RADIAT. TRANSFER <u>4</u> , 117-148 (1964).	QUANT.
KOOPMAN, D. W.	J. OPT. SOC. AM. <u>54</u> , 1354-1358 (1964).	COMM.
KOROLEV, F. A., ODINTSOV, U. I. & FURSOVA, E. V.	OPTICS AND SPECTROSCOPY (U.S.S.R.) <u>16</u> , 304-305 (1964).	MISC.
BENNETT, J., W. R., KINDLMANN, P. J. & MERCER, G. N.	APPLIED OPTICS SUPPLEMENT 2 OF CHEMICAL LASERS 34-57 (1965).	LIFE

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KLOSE, J. .	ASTROPHYS. J. <u>141</u> , 814-818 (1965).	LIFE
STEWART, J. C. & ROTENBERG, M.	PHYS. REV. <u>140</u> , 1508A-1519A (1965).	QUANT.
KLOSE, J. .	PHYS. REV. <u>141</u> , 181-186 (1966).	LIFE

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GARSTANG, R. H.	MONTHLY NOTICES ROY. ASTRON. SOC. <u>110</u> , 612-614 (1950).	CA & SCF
GARSTANG, R. H.	MONTHLY NOTICES ROY. ASTRON. SOC. <u>114</u> , 118-133 (1954).	QUANT., REL. & CA
TRAVING, G.	Z. ASTROPHYS. <u>36</u> , 1-41 (1955).	CA
NAQVI, A. M.	CONFERENCE ON OPACITY, ALBUQUERQUE, N.M., APRIL 8 & 9, GEOPHYSICS CORPORATION OF AMERICA, BEDFORD, MASSACHUSETTS.	QUANT.
ALLER, L. H., ELSTE, G. & JUGAKU, J.	ASTROPHYS. J. SUPP 1 SER. <u>3</u> , NO. 25, 1-35 (1957).	CA
BAGUS, P. S.	U. S. ATOMIC ENERGY COMMISSION ANL-6959 (1964).	SCF
KOOPMAN, D. W.	J. OPT. SOC. AM. <u>54</u> , 1354-1358 (1964).	EMISS.
KOOPMAN, D. W.	THESIS UNIVERSITY OF MICHIGAN (1964).	EMISS.
NAQVI, A. M.	J. QUANT. SPECTROSC. RADIAT. TRANSFE <u>4</u> , 597-615 (1964).	QUANT.
FROESE, C.	PHYS. REV. <u>137</u> , A1644-A1648 (1965).	SCF
OSTERBROCK, D. E.	ASTROPHYS. J. <u>142</u> , 1423-1430 (1965).	QUANT. FORB.

NE III

GARSTANG, R. H.	MONTHLY NOTICES ROY. ASTRON. SOC. <u>111</u> , 115-124 (1951).	QUANT. FORB.
YUTSIS, A. P. & VIZBARAITE, I. I.	TRUDY AKADEMII NAUK LITOVSKOI S.S.R., SERIJA B, 1 (17) 3-15 (1959).	QUANT. FORB.
BOLOTIN, A. B., SHIRONAS, I. I. & BRAIMAN, M. YU.	VILNIAUS VALSTYBINIO V. KAPSUKO VARDU UNIVERSITETO MOKSLO DARBAI <u>33</u> , MATEMATIKA FIZIKA <u>2</u> , 107-112 (1960).	QUANT.
OSTERBROCK, D. E.	ASTROPHYS. J. <u>142</u> , 1423-1430 (1965).	QUANT. FORB.

NE IV

LEVINSON, I. B., BOLOTIN, A. B. & LEVIN, L. I.	TRUDY VIL'NYUSSKOGO UN. <u>49-55</u> (1956) (TRANSL.).	QUANT.
GARSTANG, R. H.	MONTHLY NOTICES ROY. ASTRON. SOC. <u>120</u> , 201-203 (1960).	QUANT. FORB.
BASHKIN, S., HEROUX, L. & SHAW, J.	PHYS. LETTERS <u>13</u> , 229-231 (1964).	LIFE

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Obi, S.	PUBL. ASTRON. SOC. JAPAN 2, 150-155 (1950).	QUANT. FORB., REL.
GARSTANG, R. H.	MONTHLY NOTICES ROY. ASTRON. SOC. <u>111</u> , 115-124 (1951).	QUANT. FORB.
BOLOTIN, A. B., LEVINSON, I. B. & LEVIN, L. I.	SOVIET PHYS. - JETP 2, 391-395 (1956).	QUANT.
OSTERBROCK, D. E.	ASTROPHYS. J. <u>142</u> , 1423-1430 (1965).	QUANT. FORB.

NE VI

BASHKIN, S., HEROUX, L. & SHAW, J.	PHYS. LETTERS <u>13</u> , 229-231 (1964).	LIFE
NIKITIN, A. A. & YAKUBOVSKII, O. A.	SOVIET PHYS.-DOKLADY 2, 409-411 (1964).	QUANT. FORB.

NE VII

VESELOV, M. G.	ZHUR. EKSPTL. I TEORET. FIZ. <u>19</u> , 959-964 (1949) (ATS TRANSL.).	QUANT.
VESELOV, M. G.	VESTNIK Leningrad Univ. SER. FIZ. I KHIM. NO. 8, 181-185 (1953) (O.T.P. 1).	QUANT.

NE VIII

VESELOV, M. G.	ZHUR. EKSPTL. I TEORET. FI. <u>19</u> , 959-964 (1949) (ATS TRANSL.).	QUANT.
WEISS, A. W.	ASTROPHYS. J. <u>138</u> , 1262-1276 (1963).	SCF
BERKNER, K. H., COOPER III, W. S., KAPLAN, S. N. & PYLE, R. V.	PHYS. LETTERS <u>16</u> , 35-36 (1965).	LIFE

NE IX

VESELOV, M. G.	ZHUR. EKSPTL. I TEORET. FIZ. <u>19</u> , 959-964 (1949) (ATS TRANSL.).	QUANT.
VESELOV, M. G.	VESTNIK Leningrad Univ. SER. FIZ. I KHIM. NO. 8, 181-185 (1953).	QUANT.

Ni (NICKEL)*

Ni I

BOUMA, T.	THESIS UTRECHT (1930).	EMISS., REL.
ORNSTEIN, L. S. & BOUMA, T.	PHYS. REV. <u>36</u> , 679-693 (1930).	EMISS., REL.
VAN DRIEL, H.	THESIS UTRECHT (1935).	EMISS., REL.
KING, R. B.	ASTROPHYS. J. <u>108</u> , 87-91 (1948).	ABSORPT., REL.
WILSON, O. C.	ASTROPHYS. J. <u>107</u> , 126-150 (1948).	MISC., REL.
ESTABROOK, F. B.	THESIS CALIFORNIA INSTITUTE OF TECHNOLOGY (1950).	ABSORPT.
ESTABROOK, F. B.	ASTROPHYS. J. <u>113</u> , 684-689 (1951).	ABSORPT.
PARCHEVSKII, G. F. & PENKIN, N. P.	VESTNIK LENINGRAD UNIV. SER. FIZ. I KHIM. <u>2</u> , #11, 113-118 (1954) (TRANSL. BY J. TECH., HARVARD COLLEGE OBSERVATORY, JUNE 1964).	HOOK, REL.
PARCHEVSKI, G. F. & PENKIN, N. P.	BULL. ACAD. SCI. U.S.S.R. PHYS. SER. <u>12</u> , 4-5 (1955).	COMM.
ALLEN, C. W. & ASAAD, A. S.	MONTHLY NOTICES ROY. ASTRON. SOC. <u>117</u> , 36-49 (1957).	EMISS.
HINNOV, E. & KOHN, H.	J. OPT. SOC. AM. <u>47</u> , 156-162 (1957).	EMISS.
VARSAVSKY, C. M.	THESIS HARVARD (1958).	QUANT.
ADDINK, N. W. H.	SPECTROCHIM. ACTA <u>15</u> , 349-359 (1959).	EMISS.
ALLEN, C. W.	MONTHLY NOTICES ROY. ASTRON. SOC. <u>121</u> , 299-332 (1960).	COMM. & CA
BOYARCHUK, M. E. & BOYARCHUK, A. A.	AKADEMIIA NAUK S.S.S.R. KRYMSKAIA ASTROFIZICHESKAIA OBSERVATORIIA. IZVESTIIA <u>22</u> , 234-256 (1960) (O.T.P. 1).	COMM.
MITROFANOVA, L. A.	PULKOVO. ASTRONOMICHESKAIA OBSERVATORIIA. IZVESTIIA <u>21</u> , 185-189 (1960) (O.T.P. 2).	EMISS., REL.
MOROZOVA, N. P. & STARTSEV, G. P.	OPTICS AND SPECTROSCOPY (U.S.S.R.) <u>17</u> , 174-176 (1964).	EMISS.
CORLISS, C. H.	J. RESEARCH NAT. BUR. STANDARDS <u>69A</u> , 87-107 (1965).	COMM. & EMISS.
LAWRENCE, G. M., LINK, J. K. & KING, R. B.	ASTROPHYS. J. <u>141</u> , 293-307 (1965).	ABSORPT.
STEWART, J. C. & ROTENBERG, M.	PHYS. REV. <u>140</u> , 1508A-1519A (1965).	QUANT.
BELL, G. D., PAQUETTE, D. R. & WIESE, W. L.	ASTROPHYS. J. <u>143</u> , 559-572 (1966).	EMISS., REL.

Ni II

ORNSTEIN, L. S. & BOUMA, T.	PHYS. REV. <u>36</u> , 679-693 (1930).	EMISS., REL.
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*SEE ALSO TABLE 1.

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ALLER, L. H., HAZEN, M., DOHERTY, L., GRANT, G., JUGAKU, J., SPIEGEL, E. & WADDELL, J.	PUBLICATIONS OF THE OBSERVATORY, UNIV. OF MICHIGAN (FEB. 19, 1954).	MISC., REL.
GARSTANG, R. H.	MONTHLY NOTICES ROY. ASTRON. SOC. <u>118</u> , 234-240 (1958).	QUANT. FORB.
BOYARCHUK, M. E. & BOYARCHUK, A. A.	AKADEMIIA NAUK S.S.S.R. KRYMSKAIA ASTROFIZICHESKAIA OBSERVATORIIA. IZVESTIIA <u>22</u> , 234-256 (1960) (O.T.P. 1).	COMM.
GROTH, H. G.	Z. ASTROPHYS. <u>51</u> , 231-285 (1961).	MISC.
GRUZDEV, P. F.	OPTICS & SPECTROSCOPY (U.S.S.R.) <u>13</u> , 249-250 (1962).	QUANT., REL.
BELL, G. D., PAQUETTE, D. R. & WIESE, W. L.	ASTROPHYS. J. <u>143</u> , 559-572 (1966).	EMISS., REL.
MENDLOWITZ, H.	ASTROPHYS. J. <u>143</u> , 573-590 (1966).	QUANT., REL.
Ni III		
GARSTANG, R. H.	MONTHLY NOTICES ROY. ASTRON. SOC. <u>118</u> , 234-240 (1958).	QUANT. FORB.
Ni XII		
EDLÉN, B.	Z. ASTROPHYS. <u>22</u> , 30-64 (1942).	QUANT. FORB.
HUANG, K.	ASTROPHYS. J. <u>101</u> , 187-195 (1945).	MISC. FORB.
Ni XIII		
EDLÉN, B.	Z. ASTROPHYS. <u>22</u> , 30-64 (1942).	QUANT. FORB.
HUANG, K.	ASTROPHYS. J. <u>101</u> , 187-195 (1945).	MISC. FORB.
Ni XV		
EDLÉN, B.	Z. ASTROPHYS. <u>22</u> , 30-64 (1942).	QUANT. FORB.
HUANG, K.	ASTROPHYS. J. <u>101</u> , 187-195 (1945).	MISC. FORB.
Ni XVI		
EDLÉN, B.	Z. ASTROPHYS. <u>22</u> , 30-64 (1942).	QUANT. FORB.
HUANG, K.	ASTROPHYS. J. <u>101</u> , 187-195 (1945).	MISC. FORB.

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O (OXYGEN)*

O I

RUSSELL, H. N.	ASTROPHYS. J. <u>28</u> , 239-297 (1933).	ESTIM.
CONDON, E. U.	ASTROPHYS. J. <u>29</u> , 217-234 (1934).	QUANT. FORB.
BOWEN, I. S.	REV. MOD. PHYS. <u>20</u> , 109-112 (1948).	ESTIM.
PETRIE, W., MONAGHAN, P. A. & DOLAN, P. A.	CAN. J. RESEARCH <u>27A</u> , 213-217 (1949).	QUANT.
EMELEUS, K. G., SAYERS, N. D. & BAILEY, R. A.	NATURE <u>166</u> , 656-657 (1950).	LIFE FORB.
PETRIE, W.	J. GEOPHYS. RESEARCH <u>55</u> , 143-151 (1950).	QUANT.
GARSTANG, R. H.	MONTHLY NOTICES ROY. ASTRON. SOC. <u>111</u> , 115-124 (1951).	QUANT. FORB.
SAYERS, N. D. & EMELEUS, K. G.	PROC. PHYS. SOC. LONDON A <u>65</u> , 219-226 (1952).	LIFE FORB. & COMM.
YAMANOUCHI, T. & HORIE, H.	J. PHYS. SOC. JAPAN <u>2</u> , 52-56 (1952).	QUANT. FORB.
PARKER, L. W. & HOLMES, J. R.	J. OPT. SOC. AM. <u>43</u> , 103-109 (1953).	QUANT.
HERMAN, L. & HERMAN, R.	"PROCEEDINGS OF THE CONFERENCE ON AURORAL PHYSICS" No. 30, 221-241 (1954).	LIFE FORB.
JÜRGENS, G.	Z. PHYSIK <u>138</u> , 613-622 (1954).	EMISS.
KINGSBURY, R. F.	PHYS. REV. <u>99</u> , 1846-1850 (1955).	SCF
OMHOLT, A. & HARANG, L.	J. ATMOSPHERIC AND TERREST. PHYS. <u>2</u> , 247-253 (1955).	LIFE FORB.
GARSTANG, R. H.	"THE AIRGLOW & THE AURORAE", 324-327 (ED. ARMSTRONG & OALGARNO, PERGAMON PRESS, NEW YORK, 1956).	QUANT. FORB.
OMHOLT, A.	J. ATMOSPHERIC AND TERREST. PHYS. <u>2</u> , 28-35 (1956).	CA & SCF
OMHOLT, A.	"THE AIRGLOW AND THE AURORAE" 178-182 (ED. ARMSTRONG AND OALGARNO, PERGAMON PRESS, NEW YORK 1956).	LIFE FORB. & COMM.
VAINSHTEIN, L. A.	OPTIKA I SPEKTROSKOPIYA <u>3</u> , 313-321 (1957) (TRANSL.).	QUANT.
LISZKA, L. & NIEWODNICZAŃSKI, H.	ACTA PHYS. POLON. <u>12</u> , 345-351 (1958).	EMISS. FORB., REL.
VARSAVSKY, C. M.	THESIS HARVARD (1958).	QUANT.
OMHOLT, A.	GEOFYS. PUBLIKASJONER NORSKE VIDENSKAPS-ÅKAD. I OSLO <u>21</u> , 1-38 (1959).	MISC. & LIFE FORB.
YUTSIS, A. P. & VIZBARAITE, I. A. I.	TRUDY AKADEMII NAUK LITOVSKOI S.S.R., SERIJA B, 1 (17) 3-15 (1959).	QUANT. FORB.
BATES, D. R.	"PHYSICS OF THE UPPER ATMOSPHERE", 300-302 (ED. RATCLIFFE, J. A., ACADEMIC PRESS, NEW YORK, 1960).	COMM. FORB.

*SEE ALSO TABLE 1.

AUTHOR	JOURNAL	CLASSIFICATION
BOLOTIN, A. B., SHIRONAS, I. I. & BRAIMAN, M. YU.	VILNIAUS VALSTYBINIO V. KAPSUKO VARDU UNIVERSITETO MOKSLO DARBAI <u>33</u> , MATEMATIKA FIZIKA <u>2</u> , 107-112 (1960).	QUANT.
GOLDBERG, L., MÜLLER, E. A. & ALLER, L. H.	ASTROPHYS. J. SUPPL. SER. <u>5</u> , #45, 1-137 (1960).	CA
OMHOLT, A.	PLANETARY AND SPACE SCIENCE <u>2</u> , 246-248 (1960).	LIFE FORB.
STOFFREGEN, W. & DERBLOM, H.	NATURE <u>185</u> , 28-29 (1960).	LIFE FORB.
DOHERTY, L. R.	THESIS MICHIGAN (1961).	EMISS.
GARSTANG, R. H.	PROC. CAMBRIDGE PHIL. SOC. <u>57</u> , 115-120 (1961).	QUANT.
NAQVI, A. M.	GEOPHYSICS CORPORATION OF AMERICA TECHNICAL REPORT 61-21-A; ASTIA Document 263 459 (1961).	CA
WIESE, W. L. & SHUMAKER, JR., J. B.	J. OPT. SOC. AM. <u>51</u> , 937-942 (1961).	EMISS.
FOSTER, E. W.	PROC. PHYS. SOC. LONDON A <u>79</u> , 94-104 (1962).	EMISS.
SOLARSKI, JR., J. E. & WIESE, W. L.	J. OPT. SOC. AM. <u>52</u> , 592 (1962).	EMISS.
VAINSHTEIN, L. A.	TRANSACTIONS OF THE P.N. LEBEDEV PHYSICS INSTITUTE <u>15</u> , PART 1, 1-50 (1962) (CBE-TR).	QUANT.
NORMAN, G. E.	OPTICS AND SPECTROSCOPY (U.S.S.R.) <u>14</u> , 315-317 (1963).	QUANT.
BUTTREY, D. E. & GIBSON, J. B.	TECHNICAL DOCUMENTARY REPORT No. RTD-TDR-63-3047 (1964).	EMMSS.
COHEN, M. & DALGARNO, A.	PROC. ROY. SOC. LONDON A <u>280</u> , 258-270 (1964).	QUANT.
KELLY, P. S.	ASTROPHYS. J. <u>140</u> , 1247-1268 (1964).	SCF
KELLY, P. S.	J. QUANT. SPECTROSC. RADIAT. TRANSFER <u>4</u> , 117-148 (1964).	QUANT.
KELLY, P. S. & ARMSTRONG, B. H.	PHYS. REV. LETTERS <u>12</u> , 35-36 (1964).	SCF
PRAG, A. B.	THESIS UNIV. OF WASHINGTON (1964).	MISC.
PRAG, A. B. & CLARK, K. C.	PHYS. REV. LETTERS <u>12</u> , 34-35 (1964).	MISC.
SOLARSKI, JR., J. E. & WIESE, W. L.	PHYS. REV. <u>135</u> , A1236-A1241 (1964).	EMISS.
KELLY, P. S., SOKOLOFF, J. & ARMSTRONG, B. H.	TECHNICAL REPORT No. WL TR-64-172 (1965).	QUANT.
MORSE, T. A. & KAUFMAN, F.	J. CHEM. PHYS. <u>42</u> , 1785-1790 (1965).	ABSORPT.
PRAG, A. B., FAIRCHILD, C. E. & CLARK, K. C.	PHYS. REV. <u>137</u> , A1358-A1363 (1965).	MISC.
PAULSON, K. V. & SHEPHERD, G. G.	J. ATMOSPHERIC AND TERREST. PHYS. <u>22</u> , 831-841 (1965).	MISC., FORB.
STEWART, J. C. & ROTENBERG, M.	PHYS. REV. <u>140</u> , 1508A-1519A (1965).	QUANT.
O II		
RUBINOWICZ, A.	Z. PHYSIK <u>65</u> , 662-676 (1930).	QUANT., REL.

RUSSELL, H. N.	ASTROPHYS. J. <u>78</u> , 239-297 (1933).	ESTIM.
CONDON, E. U.	ASTROPHYS. J. <u>79</u> , 217-234 (1934).	QUANT. FORB.
ALLER, L. H. & MENZEL, D. H.	ASTROPHYS. J. <u>102</u> , 239-263 (1945).	QUANT.
BATES, D. R. & DAMGAARD, A.	ASTROPHYS. J. <u>107</u> , 383-385 (1948).	SCF
ALLER, L. H., UFFORD, C. W. & VAN VLECK, J. H.	ASTROPHYS. J. <u>109</u> , 42-52 (1949).	QUANT. FORB.
GARSTANG, R. H.	ASTROPHYS. J. <u>115</u> , 506-508 (1952).	QUANT. FORB.
YAMANOUCHI, T. & HORIE, H.	J. PHYS. SOC. JAPAN <u>2</u> , 52-56 (1952).	QUANT. FORB.
GARSTANG, R. H.	MONTHLY NOTICES ROY. ASTRON. SOC. <u>114</u> , 118-133 (1954).	QUANT., REL. & CA
TRAVING, G.	Z. ASTROPHYS. <u>36</u> , 1-41 (1955).	CA
GARSTANG, R. H.	"THE AIRGLOW & THE AURORAE", 324-327 (ED. ARMSTRONG & DALGARNO, PERGAMON PRESS, NEW YORK, 1956).	QUANT. FORB.
LEVINSON, I. B., BOLOTIN, A. B. & LEVIN, L. I.	TRUOY VIL'NYUSSKOGO UN. <u>5</u> , 49-55 (1956) (TRANSL.).	QUANT.
ALLER, L. H., ELSTE, G. & JUGAKU, J.	ASTROPHYS. J. SUPPL. SER. <u>3</u> , #25, 1-35 (1957).	CA
NAQVI, A. M. & TALWAR, S. P.	MONTHLY NOTICES ROY. ASTRON. SOC. <u>112</u> , 463-471 (1957).	QUANT. FORB.
SEATON, M. J. & OSTERBROCK, D. E.	ASTROPHYS. J. <u>125</u> , 66-83 (1957).	QUANT. FORB.
ALLER, L. H. & JUGAKU, J.	ASTROPHYS. J. SUPPL. SER. <u>4</u> , #38, 109-156 (1959).	CA
VARSAVSKY, C. M.	THESIS HARVARD (1958).	QUANT.
MASTRUP, F. & WIESE, W.	Z. ASTROPHYS. <u>44</u> , 259-279 (1958).	EMISS. REL.
YUTSIS, A. P. & VIZBARAITE, IA. I.	TRUOY AKADEMII NAUK LITOVSKOI S.S.R., SERIJA B, 1 (17) 3-15 (1959).	QUANT. FORB.
BATES, D. R.	"PHYSICS OF THE UPPER ATMOSPHERE", 300-302 (ED. RATCLIFFE, J. A., ACAAEMIC PRESS, NEW YORK, 1960).	COMM. FORB.
GLEMBOTSKII, I. I. & KUZMITSKITE, L. L.	TRUOY AKADEMII NAUK LITOVSKOI S.S.R. SERIJA B, 1 (21) 87-98 (1960) (O.T.P. 2).	QUANT.
NAQVI, A. M.	GEOPHYSICS CORPORATION OF AMERICA TECHNICAL REPORT 61-21-A; ASTIA DOCUMENT 263 459 (1961).	CA & COMM. FORB.
BERG, H., BURRIS, R., ECKERLE, K. & WIESE, W. L.	ASTROPHYS. J. <u>139</u> , 751-757 (1963).	EMISS., REL.
COHEN, M. & DALGARNO, A.	PROC. ROY. SOC. LONDON A <u>280</u> , 258-270 (1964).	QUANT.
CZYZAK, S. J.	PUBL. ASTRON. SOC. PACIFIC <u>76</u> , 413-429 (1964).	QUANT. FORB.
KELLY, P. S.	ASTROPHYS. J. <u>140</u> , 1247-1268 (1964).	SCF
KELLY, P. S.	J. QUANT. SPECTROSC. RAOIAT. TRANSFER <u>4</u> , 117-148 (1964).	QUANT.
FROESE, C.	PHYS. REV. <u>137</u> , A1644-A1648 (1965).	SCF

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KELLY, P. S., SOKOLOFF, J. & ARMSTRONG, B. H.	TECHNICAL REPORT NO. WL TR-64-172 (1965).	QUANT.
STEWART, J. C. & ROTENBERG, M.	PHYS. REV. <u>140</u> , 1508A-1519A (1965).	QUANT.
O III		
STEVENSON, A. F.	PROC. ROY. SOC. LONDON A <u>132</u> , 298-325 (1932).	QUANT. FORB.
CONDON, E. U.	ASTROPHYS. J. <u>72</u> , 217-234 (1934).	QUANT. FORB.
MENZEL, D. H. & ALLER, L. H.	ASTROPHYS. J. <u>94</u> , 436-448 (1941).	QUANT.
ALLER, L. H.	ASTROPHYS. J. <u>92</u> , 135-165 (1943).	QUANT.
Obi, S.	PUBL. ASTRON. SOC. JAPAN <u>2</u> , 150-155 (1950).	QUANT. FORB., REL.
GARSTANG, R. H.	MONTHLY NOTICES ROY. ASTRON. SOC. <u>111</u> , 115-124 (1951).	QUANT. FORB.
YAMANOUCHI, T. & HORIE, H.	J. PHYS. SOC. JAPAN <u>2</u> , 52-56 (1952).	QUANT. FORB.
YILMAZ, H.	PHYS. REV. <u>100</u> , 1148-1153 (1955).	QUANT. FORB.
BOLOTIN, A. B., LEVINSON, I. B. & LEVIN, L. I.	SOVIET PHYS. - JETP <u>2</u> , 391-395 (1956).	QUANT.
YUTSIS, A. P. & VIZBARAITE, I. A. I.	TRUOY AKADEMII NAUK LITOVSKOI S.S.R., SERIJA B, 1 (17) 3-15 (1959).	QUANT. FORB.
BATES, D. R.	"PHYSICS OF THE UPPER ATMOSPHERE", 300-302 (ED. RATCLIFFE, J. A., ACADEMIC PRESS, NEW YORK, 1960).	COMM. FORB.
BERG, H., BURRIS, R., ECKERLE, K. & WIESE, W. L.	ASTROPHYS. J. <u>132</u> , 751-757 (1963).	EMISS., REL.
COHEN, M. & DALGARNO, A.	PROC. ROY. SOC. LONDON A <u>280</u> , 258-270 (1964).	QUANT.
KELLY, P. S.	ASTROPHYS. J. <u>140</u> , 1247-1268 (1964).	SCF
KELLY, P. S.	J. QUANT. SPECTROSC. RADIAT. TRANSFER <u>4</u> , 117-148 (1964).	QUANT.
FROESE, C.	PHYS. REV. <u>137</u> , A1644-A1648 (1965).	SCF
KELLY, P. S., SOKOLOFF, J. & ARMSTRONG, B. H.	TECHNICAL REPORT NO. WL TR-64-172 (1965).	QUANT.
STEWART, J. C. & ROTENBERG, M.	PHYS. REV. <u>140</u> , 1508A-1519A (1965).	QUANT.
OSTERBROCK, D. E.	ASTROPHYS. J. <u>142</u> , 1423-1430 (1965).	QUANT. FORB.

O IV

ALLER, L. H.	ASTROPHYS. J. <u>92</u> , 135-165 (1943).	QUANT.
BOLOTIN, A. B. & YUTSIS, A. P.	ZHUR. EKSPIT. I TEORET. FIZ. <u>24</u> , 537-543 (1953) (O.T.P. 1).	QUANT.
NIKITIN, A. A. & YAKUBOVSKII, O. A.	SOVIET ASTRONOMY-AJ <u>2</u> , 189-198 (1963).	QUANT.

AUTHOR	JOURNAL	CLASSIFICATION
COHEN, M. & DALGARNO, A.	PROC. ROY. SOC. LONDON A <u>280</u> , 258-270 (1964).	QUANT.
KELLY, P. S.	ASTROPHYS. J. <u>140</u> , 1247-1268 (1964).	SCF
KELLY, P. S.	J. QUANT. SPECTROSC. RADIAT. TRANSFER <u>4</u> , 117-148 (1964).	QUANT.
NIKITIN, A. A. & YAKUBOVSKII, O. A.	SOVIET PHYS.-DOKLADY <u>2</u> , 409-411 (1964).	QUANT. FORB.
KELLY, P. S., SOKOLOFF, J. & ARMSTRONG, B. H.	TECHNICAL REPORT No. WL TR-64-172 (1965).	QUANT.
STEWART, J. C. & ROTENBERG, M.	PHYS. REV. <u>140</u> , 1508A-1519A (1965).	QUANT.
OSTERBROCK, D. E.	ASTROPHYS. J. <u>142</u> , 1423-1430 (1965).	QUANT. FORB.

O V

ALLER, L. H.	ASTROPHYS. J. <u>92</u> , 135-165 (1943).	QUANT.
BOLOTIN, A. B. & YUTSIS, A. P.	ZHUR. EKSPTL. I TEORET. FIZ. <u>24</u> , 537-543 (1953) (O.T.P. 1).	QUANT.
COHEN, M. & DALGARNO, A.	PROC. ROY. SOC. LONDON A <u>280</u> , 258-270 (1964).	QUANT.
KELLY, P. S.	ASTROPHYS. J. <u>140</u> , 1247-1268 (1964).	SCF
KELLY, P. S.	J. QUANT. SPECTROSC. RADIAT. TRANSFER <u>4</u> , 117-148 (1964).	QUANT.
KELLY, P. S., SOKOLOFF, J. & ARMSTRONG, B. H.	TECHNICAL REPORT No. WL TR-64-172 (1965).	QUANT.
PFENNIG, H., STEELE, P. & TREFFTZ, E.	J. QUANT. SPECTROSC. RADIAT. TRANSFER <u>5</u> , 355-347 (1965).	SCF

O VI

KANTSERIAVICHUS, A.	LITOVSKII FIZICHESKII SBORNIK <u>2</u> , 245-257 (1962).	QUANT.
COHEN, M. & DALGARNO, A.	PROC. ROY. SOC. LONDON A <u>275</u> , 492-503 (1963).	QUANT.
FLANNERY, M. R. & STEWART, A. L.	MONTHLY NOTICES ROY. ASTRON. SOC. <u>126</u> , 387-392 (1963).	QUANT.
VARSAVSKY, C. M.	PLANETARY AND SPACE SCIENCE <u>11</u> , 1001-1014 (1963).	QUANT.
WEISS, A. W.	ASTROPHYS. J. <u>138</u> , 1262-1276 (1963).	SCF
COHEN, M. & DALGARNO, A.	PROC. ROY. SOC. LONDON A <u>280</u> , 258-270 (1964).	QUANT.
KELLY, P. S.	ASTROPHYS. J. <u>140</u> , 1247-1268 (1964).	SCF
KELLY, P. S.	J. QUANT. SPECTROSC. RADIAT. TRANSFER <u>4</u> , 117-148 (1964).	QUANT.
BERKNER, K. H., COOPER III, W. S., KAPLAN, S. N. & PYLE, R. V.	PHYS. LETTERS <u>16</u> , 35-36 (1965).	LIFE
KELLY, P. S., SOKOLOFF, J. & ARMSTRONG, B. H.	TECHNICAL REPORT No. WL TR-64-172 (1965).	QUANT.

O VII

KANTSERIAVICHUS, A.

LITOVSKII FIZICHESKII SBORNIK 2, 245-257 (1962).

QUANT.

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P (PHOSPHORUS)*

P I

CZYZAK, S. J. & KRUEGER, T. K.

MONTHLY NOTICES ROY. ASTRON. SOC. 126, 177-194
(1963).

QUANT. FORB.

P II

JUGAKU, J., SARGENT, L. W.

ASTROPHYS. J. 134, 783-796 (1961).

CA

& GREENSTEIN, J. L.

CZYZAK, S. J. & KRUEGER, T. K.

MONTHLY NOTICES ROY. ASTRON. SOC. 126, 177-194
(1963).

QUANT. FORB.

P III

NIKITIN, A. A. & YAKUBOVSKII,
O. A.SOVIET PHYS.-DOKLADY 2, 409-411 (1964).

QUANT. FORB.

P XI

NIKITIN, A. A. & YAKUBOVSKII,
O. A.SOVIET PHYS.-DOKLADY 2, 409-411 (1964).

QUANT. FORB.

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PB (LEAD)*

PB I

MROZOWSKI, S.

PHYS. REV. 58, 1086-1093 (1940).

EMISS. FORB.,

REL.

GERJUOY, E.

PHYS. REV. 60, 233-240 (1941).

QUANT. FORB.

JENKINS, F. A. & MROZOWSKI, S.

PHYS. REV. 60, 225-233 (1941).

EMISS. FORB.,

REL.

*SEE ALSO TABLE 1.

AUTHOR	JOURNAL	CLASSIFICATION
ENGLER, H. D.	Z. PHYSIK <u>144</u> , 343-353 (1956).	ABSORPT.
ALLEN, C. W.	MONTHLY NOTICES ROY. ASTRON. SOC. <u>117</u> , 622-628 (1957).	COMM.
ALLEN, C. W. & ASAAD, A. S.	MONTHLY NOTICES ROY. ASTRON. SOC. <u>117</u> , 36-49 (1957).	EMISS.
KHOKHLOV, M. Z.	AKADEMIIA NAUK S.S.S.R. KRYMSKAIA ASTROFIZICHESKAIA OBSERVATORIIA. IZVESTIIA <u>21</u> , 84-102 (1959) (O.T.P. 1).	EMISS., REL.
BELL, G. D. & KING, R. B.	ASTRON. J. <u>65</u> , 483 (1960).	ABSORPT.
KHOKHLOV, M. Z.	AKADEMIIA NAUK S.S.S.R. KRYMSKAIA ASTROFIZICHESKAIA OBSERVATORIIA. IZVESTIIA <u>22</u> , 118-127 (1960) (O.T.P. 2).	ABSORPT. & EMISS.
KHOKHLOV, M. Z.	AKADEMIIA NAUK S.S.S.R. KRYMSKAIA ASTROFIZICHESKAIA OBSERVATORIIA. IZVESTIIA <u>22</u> , 128-133 (1960) (O.T.P. 2).	EMISS.
BELL, G. D. & KING, R. B.	ASTROPHYS. J. <u>133</u> , 718-722 (1961).	ABSORPT.
HELLIWELL, T. M.	ASTROPHYS. J. <u>133</u> , 566-571 (1961).	QUANT.
KHOKHLOV, M. Z.	AKADEMIIA NAUK S.S.S.R. KRYMSKAIA ASTROFIZICHESKAIA OBSERVATORIIA. IZVESTIIA <u>25</u> , 249-267 (1961).	EMISS., REL. & ABSORPT., REL.
KHOKHLOV, M. Z.	AKADEMIIA NAUK S.S.S.R. KRYMSKAIA ASTROFIZICHESKAIA OBSERVATORIIA. IZVESTIIA <u>26</u> , 52-62 (1961).	QUANT.
KHOKHLOV, M. Z.	AKADEMIIA NAUK S.S.S.R. KRYMSKAIA ASTROFIZICHESKAIA OBSERVATORIIA. IZVESTIIA <u>29</u> , 131-140 (1963).	COMM.
PENKIN, N. P. & SLAVENAS, I. Yu. Yu.	OPTICS AND SPECTROSCOPY (U.S.S.R.) <u>15</u> , 83-88 (1963).	HOOK
BROWN, W. A.	THESIS UNIV. OF MICHIGAN (1964).	EMISS.
NOVICK, R., PERRY, B. W. & SALOMAN, E. B.	BULL. AM. PHYS. SOC. II <u>2</u> , 625 (1964).	MISC.
SALOMAN, E. B.	BULL. AM. PHYS. SOC. II, <u>10</u> , 49 (1965).	MISC.

PB II

BROWN, W. A.	THESIS UNIV. OF MICHIGAN (1964).	EMISS.
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Pd (PALLADIUM)*

Pd I

LAWRENCE, G. M., LINK, J. K. & KING, R. B.	ASTROPHYS. J. <u>141</u> , 293-307 (1965).	ABSORPT.
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*SEE ALSO TABLE 1.

Rb (RUBIDIUM)*

Rb I

BLEEKER, C. E.	THESIS UTRECHT (1928).	EMISS., REL.
PROKOF'EV, V. K.	Z. PHYSIK <u>52</u> , 387-393 (1929).	HOOK FORB., REL.
STEVENSON, A. F.	PROC. ROY. SOC. LONDON A <u>128</u> , 591-599 (1930).	QUANT. FORB.
PROKOF'EV, V. K.	ZHUR. EKSP. I TEORET. FIZ. <u>1</u> , 123-127 (1931) (O.T.P. 1).	HOOK FORB., REL.
RUBINOWICZ, A. & BLATON, J.	ERGB. EXAKT. NATURW. <u>11</u> , 176-217 (1932).	COMM.
ORNSTEIN, L. S. & KEY, J.	PHYSICA <u>1</u> , 945-952 (1934).	COMM., REL.
PROKOF'EV, V. K. & SHTANDEL, G.	ZHUR. EKSP. I TEORET. FIZ. <u>4</u> , 359-367 (1934) (O.T.P. 1).	HOOK, REL.
HEIERMAN, J. H.	THESIS UTRECHT (1937).	EMISS.
KEY, J.	THESIS UTRECHT (1937).	EMISS., REL.
STEPHENSON, G.	NATURE <u>162</u> , 112 (1951).	MISC.
STEPHENSON, G.	PROC. PHYS. SOC. LONDON A <u>64</u> , 458-464 (1951).	MISC.
MEYER-BERKHOUT, U.	Z. PHYSIK <u>141</u> , 185-197 (1955).	MISC.
YANOUKH, F.	VESTNIK Leningrad Univ. Ser. Fiz. i Khim. <u>10</u> , 135-142 (1955) (O.T.P. 2).	QUANT. REL.
GOL'DBERG, G. I.	PULKOVO. ASTRONOMICHESKAYA OBSERVATORIIA. IZVESTIYA <u>20</u> , 126-137 (1956) (O.T.P. 1).	HOOK & SCF
HEAVENS, O. S.	J. OPT. Soc. Am. <u>51</u> , 1058-1061 (1961).	CA
NAQVI, A. M.	GEOPHYSICS CORPORATION OF AMERICA TECHNICAL REPORT 61-21-A; ASTIA DOCUMENT 263 459 (1961).	CA
ANDERSON, E. M. & ZILITIS, V. A.	OPTICS AND SPECTROSCOPY (U.S.S.R.) <u>16</u> , 211-214 (1963).	QUANT.
FELDMAN, P. & NOVICK, R.	PHYS. REV. <u>11</u> , 278-281 (1963).	LIFE
HERTZBERG, M. & HOLLAND, R.	J. QUANT. SPECTROSC. RADIAT. TRANSFER <u>5</u> , 313-320 (1965).	EMISS., REL.

Rb II

PETERSEN, R.	PHYS. & CHEM. SOLIDS <u>1</u> , 284 (1957).	QUANT., REL.
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Rn (RADON)*

Rn II

EDLÉN, B.	PHYS. REV. <u>65</u> , 248 (1944).	QUANT. FORB.
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*SEE ALSO TABLE 1.

Ru (RUTHENIUM)*

Ru I

GOLDBERG, L., MÜLLER, E. A. & ALLER, L. H.	ASTROPHYS. J. SUPPL. SER. <u>5</u> , #45, 1-137 (1960).	CA
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S (SULPHUR)*

S I

BOWEN, I. S.	REV. MOD. PHYS. <u>20</u> , 109-112 (1948).	ESTIM. FORB.
OSTERBROCK, D. E.	ASTROPHYS. J. <u>114</u> , 469-472 (1951).	QUANT. FORB.
GOLDBERG, L., MÜLLER, E. A. & ALLER, L. H.	ASTROPHYS. J. SUPPL. SER. <u>5</u> , #45, 1-137 (1960).	CA
CZYZAK, S. J. & KRUEGER, T. K.	MONTHLY NOTICES ROY. ASTRON. SOC. <u>126</u> , 177-194 (1963).	QUANT. FORB.

S II

CONDON, E. U.	ASTROPHYS. J. <u>29</u> , 217-234 (1934).	QUANT. FORB.
GARSTANG, R. H.	ASTROPHYS. J. <u>115</u> , 506-508 (1952).	QUANT. FORB.
GARSTANG, R. H.	MONTHLY NOTICES ROY. ASTRON. SOC. <u>114</u> , 118-133 (1954).	QUANT., REL. & CA
NAQVI, A. M. & TALWAR, S. P.	MONTHLY NOTICES ROY. ASTRON. SOC. <u>112</u> , 463-471 (1957).	QUANT. FORB.
ALLER, L. H. & JUGAKU, J.	ASTROPHYS. J. SUPPL. SER. <u>4</u> , #38, 109-156 (1959).	CA
GAUSTAD, J. E. & SPITZER, JR., L.	ASTROPHYS. J. <u>134</u> , 771-776 (1961).	ESTIM.
CZYZAK, S. J. & KRUEGER, T. K.	MONTHLY NOTICES ROY. ASTRON. SOC. <u>126</u> , 177-194 (1963).	QUANT. FORB.
CZYZAK, S. J.	PUBL. ASTRON. SOC. PACIFIC <u>26</u> , 413-429 (1964).	QUANT. FORB.

S III

GAUSTAD, J. E. & SPITZER, JR., L.	ASTROPHYS. J. <u>134</u> , 771-776 (1961).	ESTIM.
CZYZAK, S. J. & KRUEGER, T. K.	MONTHLY NOTICES ROY. ASTRON. SOC. <u>126</u> , 177-194 (1963).	QUANT. FORB.

*SEE ALSO TABLE 1.

AUTHOR	JOURNAL	CLASSIFICATION
S IV		
GAUSTAD, J. E. & SPITZER, JR., L.	ASTROPHYS. J. <u>134</u> , 771-776 (1961).	ESTIM.
NIKITIN, A. A. & YAKUBOVSKII, O. A.	SOVIET PHYS.-DOKLADY <u>2</u> , 409-411 (1964).	QUANT. FORB.

S XI		
NIKITIN, A. A. & YAKUBOVSKII, O. A.	SOVIET PHYS.-DOKLADY <u>2</u> , 409-411 (1964).	QUANT. FORB.

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Sc (SCANDIUM)*		
Sc I		
OSTROVSKII, YU. I. & PENKIN, N. P.	OPTIKA I SPEKTROSKOPIYA <u>3</u> , 391-393 (1957) (TRANSL.).	HOOK, REL.
MITROFANOVA, L. A.	PULKOVO. ATRONOMICIESKAIA OBSERVATORIIA. IZVESTIIA <u>21</u> , #162, 159-161 (1958) (TRANSL.).	EMISS., REL.
ALLEN, C. W.	MONTHLY NOTICES ROY. ASTRON. SOC. <u>121</u> , 299-332 (1960).	COMM. & CA
GOLDBERG, L., MÜLLER, E. A. & ALLER, L. H.	ASTROPHYS. J. SUPPL. SER. <u>5</u> , #45, 1-137 (1960).	CA
STEWART, J. C. & ROTENBERG, M.	PHYS. REV. <u>140</u> , 1508A-1519A (1965).	QUANT.

Sc II		
WILSON, O. C.	ASTROPHYS. J. <u>107</u> , 126-150 (1948).	MISC., REL.
ALLER, L. H., HAZEN, M., DOHERTY, L., GRANT, G., JUGAKU, J., SPIEGEL, E. & WADDELL, J.	PUBLICATIONS OF THE OBSERVATORY, UNIV. OF MICHIGAN (FEB. 19, 1954).	MISC., REL.
MITROFANOVA, L. A.	PULKOVO. ATRONOMICIESKAIA OBSERVATORIIA. IZVESTIIA <u>21</u> , #162, 159-161 (1958) (TRANSL.).	EMISS., REL.
BOYARCHUK, M. E. & BOYARCHUK, A. A.	AKADEMIIA NAUK S.S.S.R. KRYMSKAIA ASTROFIZECHESKAIA OBSERVATORIIA. IZVESTIIA <u>22</u> , 234-256 (1960) (O.T.P. 1).	COMM.
GROTH, H. G.	Z. ASTROPHYS. <u>51</u> , 231-285 (1961).	MISC.

*SEE ALSO TABLE 1.

AUTHOR	JOURNAL	CLASSIFICATION
SLAVENAS, I. YU. YU.	OPTICS AND SPECTROSCOPY (U.S.S.R.) <u>16</u> , 214-216 (1964).	HOOK, REL.
NIEWODNICZAŃSKI, H. & PIETRUSZKA, J.	ACTA PHYS. POLON. <u>27</u> , 807-813 (1965).	EMISS. FORB., REL.

SI II

RUSSELL, H. N.	ASTROPHYS. J. <u>28</u> , 239-297 (1933).	ESTIM.
BIERMANN, L.	NACHR. AKAD. WISS. GÖTTINGEN, MATH-PHYSIK. KL. 116-118 (1946-1948).	SCF
BATES, D. R. & DAMGAARD, A.	ASTROPHYS. J. <u>102</u> , 383-385 (1948).	SCF
BIERMANN, L. & LÜBECK, K.	Z. ASTROPHYS. <u>25</u> , 325-339 (1948).	SCF
ALLER, L. H., HAZEN, M., DOHERTY, L., GRANT, G., JUGAKU, J., SPIEGEL, E. & WADDELL, J.	PUBLICATIONS OF THE OBSERVATORY, UNIV. OF MICHIGAN (FEB. 19, 1954).	MISC., REL.
VARSAVSKY, C. M.	THESIS HARVARD (1958).	QUANT.
HEY, P.	Z. PHYSIK <u>152</u> , 79-88 (1959).	EMISS.
BOYARCHUK, M. E. & BOYARCHUK, A. A.	AKADEMIJA NAUK S.S.S.R. KRYMSKAJA ASTROFIZECHESSKAJA OBSERVATORIIA. IZVESTIIA <u>22</u> , 234-256 (1960) (O.T.P. 1).	COMM.
JUGAKU, J., SARGENT, L. W. & GREENSTEIN, J. L.	ASTROPHYS. J. <u>134</u> , 783-796 (1961).	CA
NIKITIN, A. A. & YAKUBOVSKII, O. A.	SOVIET PHYS.-DOKLADY <u>2</u> , 409-411 (1964).	QUANT. FORB.

SI III

RUSSELL, H. N.	ASTROPHYS. J. <u>28</u> , 239-297 (1933).	ESTIM.
ALLER, L. H. & JUGAKU, J.	ASTROPHYS. J. SUPPL. SER. <u>4</u> , #38, 109-156 (1959).	CA
GAUSTAD, J. E. & SPITZER, JR., L.	ASTROPHYS. J. <u>134</u> , 771-776 (1961).	COMM. & ESTIM.

SI IV

RUSSELL, H. N.	ASTROPHYS. J. <u>28</u> , 239-297 (1933).	ESTIM.
RUDKJOBING, M.	PUBLICATIONS OF THE COPENHAGEN OBSERVATORY No. 145, 74-82 (1947).	QUANT.
TRAVING, G.	Z. ASTROPHYS. <u>36</u> , 1-41 (1955).	CA
GAUSTAD, J. E. & SPITZER, JR., L.	ASTROPHYS. J. <u>134</u> , 771-776 (1961).	COMM. & ESTIM.

AUTHOR	JOURNAL	CLASSIFICATION
HOUZIAUX, L. & SAOINE, M. P.	BULL. SOC. ROY. SCI. LIÉGE <u>30</u> , 287-299 (1961).	CA
DOUGLAS, A. S. & GARSTANG,	PROC. CAMBRIDGE PHIL. SOC. <u>58</u> , 377-381 (1962).	SCF
HOUZIAUX, L.	BULLETIN DE LA CLASSE DES SCIENCES ACAA. ROY DE BELGIQUE <u>49</u> , 356-361 (1963).	CA
KISIEL, A.	ACTA PHYS. POLON. <u>23</u> , 167-175 (1963).	EMISS., REL.
STEWART, J. C. & ROTENBERG, M.	PHYS. REV. <u>140</u> , 1508A-1519A (1965).	QUANT.
S I X		
GARSTANG, R. H.	ANN. ASTROPHYS. <u>25</u> , 109-117 (1962).	QUANT. FORB. & CA
NIKITIN, A. A. & YAKUBOVSKII, O. A.	SOVIET PHYS.-DOKLADY <u>2</u> , 409-411 (1964).	QUANT. FORB.
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S N (TIN)*		
S N I		
ALLEN, C. W.	MONTHLY NOTICES ROY. ASTRON. SOC. <u>112</u> , 622-628 (1957).	COMM.
ALLEN, C. W. & ASAAD, A. S.	MONTHLY NOTICES ROY. ASTRON. SOC. <u>112</u> , 36-49 (1957).	EMISS.
PROKOF'EV, V. K., NAGIBINA, I. M. & PETROVA, G. P.	OPTICS & SPECTROSCOPY (U.S.S.R.) <u>8</u> , 195-197 (1960).	EMISS.
KHOKHLOV, M. Z.	AKADEMII NAUK S.S.S.R. KRYMSKAIA ASTROFIZICHESKAIA OBSERVATORIIA. IZVESTIIA <u>25</u> , 249-267 (1961).	EMISS., REL. & ABSORPT., REL.
KHOKHLOV, M. Z.	AKADEMIIA NAUK S.S.S.R. KRYMSKAIA ASTROFIZICHESKAIA OBSERVATORIIA. IZVESTIIA <u>26</u> , 52-62 (1961).	QUANT.
KHOKHLOV, M. Z.	AKADEMIIA NAUK S.S.S.R. KRYMSKAIA ASTROFIZICHESKAIA OBSERVATORIIA. IZVESTIIA <u>28</u> , 277-287 (1962).	ABSORPT., REL.
KHOKHLOV, M. Z.	AKADEMIIA NAUK S.S.S.R. KRYMSKAIA ASTROFIZICHESKAIA OBSERVATORIIA. IZVESTIIA <u>29</u> , 131-140 (1963).	EMISS., REL., ABSORPT., REL. & COMM.
PENKIN, N. P. & SLAVENAS, I. Yu. Yu.	OPTICS AND SPECTROSCOPY (U.S.S.R.) <u>15</u> , 83-88 (1963).	HOOK
LAWRENCE, G. M., LINK, J. K. & KING, R. B.	ASTROPHYS. J. <u>141</u> , 293-307 (1965).	ABSORPT.

*SEE ALSO TABLE 1.

SR (STRONTIUM)*

SR I

KERSCHBAUM, H.	ANN. PHYSIK <u>83</u> , 287-295 (1927).	CANAL
PROKOF'EV, V. K.	Z. PHYSIK <u>50</u> , 701-715 (1928).	HOOK, REL.
PROKOF'EV, V. K.	ZHUR. EKSP. I TEORET. FIZ. <u>1</u> , 111-122 (1931) (O.T.P. 1).	HOOK, REL.
KAST, W.	Z. PHYSIK <u>79</u> , 731-735 (1932).	EMISS., REL.
CHAMALAN, F. J.	THESIS UTRECHT (1934).	EMISS., REL. & QUANT., REL.
KING, G. W. & VAN VLECK, J. H.	PHYS. REV. <u>56</u> , 464-465 (1939).	QUANT. FORB., REL.
SCHUTTEVAER, J. W.	THESIS UTRECHT (1942).	EMISS., REL.
SCHUTTEVAER, J. W., DE BONT, M. J. & VAN DEN BROEK, TH. H.	PHYSICA <u>10</u> , 544-552 (1943).	EMISS., REL.
KRUTHOF, A. M.	PHYSICA <u>11</u> , 129-143 (1944).	ESTIM.
EBERHAGEN, A.	Z. PHYSIK <u>143</u> , 392-411 (1955).	EMISS.
MANNKOPFF, R.	EXPERIM. TECHN. D. PHYSIK. SONDERHEFT SPEKTROSKOPIE <u>44-50</u> (1955).	COMM.
MITROFANOVA, L. A.	PULKOVO. ASTRONOMICHESKAYA OBSERVATORIIA. IZVESTIYA <u>20</u> , #159, 52-54 (1958) (O.T.P. 1).	EMISS., REL.
OSTROVSKII, YU. I., PENKIN, N. P. & SHABANOVA, L. N.	BULL. ACAD. SCI. U.S.S.R. PHYS. SER. <u>22</u> , 720-724 (1958).	HOOK
OSTROVSKII, YU. I., PENKIN, N. P. & SHABANOVA, L. N.	SOVIET PHYS.-DOKLADY <u>3</u> , 538-540 (1958).	HOOK
ADDINK, N. W. H.	SPECTROCHIM. ACTA <u>15</u> , 349-359 (1959).	EMISS.
OSTROVSKII, YU. I. & PENKIN, N. P.	OPTICS AND SPECTROSCOPY (U.S.S.R.) <u>11</u> , 307-309 (1961).	HOOK & COMM.
PENKIN, N. P. & SHABANOVA, L. N.	OPTICS AND SPECTROSCOPY (U.S.S.R.) <u>12</u> , 1-5 (1962).	HOOK
VAINSHTEIN, L. A. & POLUEKTOV, I. A.	OPTICS AND SPECTROSCOPY (U.S.S.R.) <u>12</u> , 254-257 (1962).	QUANT., REL.
HELLIWELL, T. M.	THESIS CALIFORNIA INSTITUTE OF TECHNOLOGY (1963).	QUANT.
NAQVI, A. M.	CONFERENCE ON OPACITY, ALBUQUERQUE, N.M., APRIL 8 & 9, GEOPHYSICS CORPORATION OF AMERICA, BEDFORD, MASSACHUSETTS.	QUANT.
HELLIWELL, T. M.	PHYS. REV. <u>135</u> , A325-A331 (1964).	QUANT.
HULPKE, E., PAUL, E. & PAUL, W.	Z. PHYSIK <u>177</u> , 257-268 (1964).	LIFE
LURIO, A., DE ZAFRA, R. L. & GOSHEN, R. J.	PHYS. REV. <u>134</u> , A1198-A1203 (1964).	MISC.

*SEE ALSO TABLE 1.

AUTHOR	JOURNAL	CLASSIFICATION
NAQVI, A. M.	J. QUANT. SPECTROSC. RADIAT. TRANSFER <u>4</u> , 597-615 (1964).	QUANT.
PENKIN, N. P. & SHABANOVA, L. N.	OPTICS AND SPECTROSCOPY (U.S.S.R.) <u>18</u> , 535-537 (1965).	COMM.
SR II		
KRUTHOF, A. M. & SMIT, J. A.	PHYSICA <u>11</u> , 129-143 (1944) (TRANSL.).	ESTIM.
NIKONOVA, E. I. & PROKOF'EV, V. K.	OPTIKA I SPEKTROSKOPIYA <u>1</u> , 290-297 (1956) (TRANSL.).	HOOK, REL.
DVORNIKOVA, I. U. & NAGIBINA, I. M.	OPTIKA I SPEKTROSKOPIYA <u>4</u> , 421-429 (1958) (O.T.P.2).	EMISS., REL.
MITROFANOVA, L. A.	PULKOVO. ASTRONOMICHESKAIA OBSERVATORIIA. IZVESTIIA <u>20</u> , #159, 52-54 (1958) (O.T.P. 1).	EMISS., REL.
OSTROVSKII, YU. I. & PENKIN, N. P.	OPTICS AND SPECTROSCOPY (U.S.S.R.) <u>10</u> , 3-6 (1961).	HOOK
OSTROVSKII, YU. I. & PENKIN, N. P.	OPTICS AND SPECTROSCOPY (U.S.S.R.) <u>11</u> , 307-309 (1961).	COMM.
ROBERTS, T. G. & HALES, W. L.	U. S. ARMY MISSILE COMMAND REDSTONE ARSENAL, ALABAMA, REPORT NO. RR-TR-62-8 (1962).	CA
BIALAS-ZABAWA, A., SKULSKA, E. & WALACH, Z.	ACTA PHYS. POLON. <u>26</u> , 175-183 (1964).	QUANT., REL.

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TH (THORIUM)*

TH II

CHIPLIS, I. V. & USHPALIS, K. K.	TRUOY AKADEMII NAUK LITOVSKOI S.S.R. SERIIA B, 2 (25) 31-39 (1961) (O.T.P. 2).	QUANT.
CHIPLIS, I. V. & USHPALIS, K. K.	FIZ. PROBL. SPEKTROSKOPII, AKAO. NAUK S.S.S.R., MATERILY 13-Go (TRINAOTSATAGO) SOVESHCH., LENINGRAD P. 21-23 (1962).	QUANT.

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TI (TITANIUM)*

Ti I

FRERICHS, R.	ANN. PHYSIK <u>81</u> , 807-845 (1926).	EMISS., REL.
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*SEE ALSO TABLE 1.

AUTHOR	JOURNAL	CLASSIFICATION
HARRISON, G. R.	J. OPT. SOC. AM. <u>17</u> , 389-416 (1928).	EMISS., REL.
HARRISON, G. R. & ENGWICHT, H.	J. OPT. SOC. AM. <u>18</u> , 287-301 (1929).	EMISS., REL.
KING, R. B. & KING, A. S.	ASTROPHYS. J. <u>87</u> , 24-39 (1938).	ABSORPT., REL.
VAN STEKELENBURG, L. H. M.	THESIS UTRECHT (1943).	EMISS., REL.
PETRIE, W.	CAN. J. RESEARCH A <u>25</u> , 42-48 (1947).	COMM.
ROHRLICH, F.	PHYS. REV. <u>74</u> , 1381-1396 (1948).	QUANT.
VAN STEKELENBURG, L. H. M.	PHYSICA <u>14</u> , 189-196 (1948).	EMISS., REL.
& SMIT, J. A.		
MITROFANOVA, L. A.	PULKOVO. ASTRONOMICHESKAIA OBSERVATORIIA. IZVESTIIA <u>12</u> , #153, 107-111 (1955) (O.T.P. 1).	EMISS., REL.
OSTROVSKII, YU. I., PARCHEVSKII, G. F. & PENKIN, N. P.	OPTIKA I SPEKTROSKOPIYA <u>1</u> , 821-832 (1956) (OTS TRANSL. 62 15508) (AD 266 653).	EMISS., REL.
AODINK, N. W. H.	SPECTROCHIM. ACTA <u>15</u> , 349-359 (1959).	HOOK, REL.
ALLEN, C. W.	MONTHLY NOTICES ROY. ASTRON. SOC. <u>121</u> , 299-332 (1960).	EMISS.
BOYARCHUK, M. E. & BOYARCHUK, A. A.	AKADEMIIA NAUK S.S.S.R. KRYMSKAIA ASTROFIZICHESKAIA OBSERVATORIIA. IZVESTIIA <u>22</u> , 234-256 (1960) (O.T.P. 1).	COMM. & CA
HEFFERLIN, R., COBB, B., HALL, D. & LEHMAN, C.	ASTROPHYS. J. <u>132</u> , 259-263 (1960).	COMM.
TATUM, J. B.	MONTHLY NOTICES ROY. ASTRON. SOC. <u>122</u> , 311-324 (1961).	EMISS., REL.
MOROZOVA, N. P. & STARTSEV, G. P.	OPTICS AND SPECTROSCOPY (U.S.S.R.) <u>17</u> , 174-176 (1964).	EMISS.
STEWART, J. C. & ROTENBERG, M.	PHYS. REV. <u>140</u> , 1508A-1519A (1965).	QUANT.

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HARRISON, G. R.	J. OPT. SOC. AM. <u>17</u> , 389-416 (1928).	EMISS., REL.
KING, R. B.	ASTROPHYS. J. <u>94</u> , 27-29 (1941).	ABSORPT., REL.
VAN STEKELENBURG, L. H. M.	THESIS UTRECHT (1943).	EMISS., REL.
PETRIE, W.	CAN. J. RESEARCH A <u>25</u> , 42-48 (1947).	COMM.
WILSON, O. C.	ASTROPHYS. J. <u>107</u> , 126-150 (1948).	MISC., REL.
VAN STEKELENBURG, L. H. M.	PHYSICA <u>14</u> , 189-196 (1948).	EMISS., REL.
& SMIT, J. A.		
ALLER, L. H., HAZEN, M., DOHERTY, L., GRANT, G., JUGAKU, J., SPIEGEL, E. & WAOOELL, J.	PUBLICATIONS OF THE OBSERVATORY, UNIV. OF MICHIGAN (FEB. 19, 1954).	MISC., REL.
MITROFANOVA, L. A.	PULKOVO. ASTRONOMICHESKAIA OBSERVATORIIA. IZVESTIIA <u>12</u> , #153, 107-111 (1955) (O.T.P. 1).	EMISS., REL.
VARSAVSKY, C. M.	THESIS HARVARO (1958).	EMISS., REL.
		QUANT.

BOYARCHUK, M. E. & BOYARCHUK, A. A.	AKADEMIIA NAUK S.S.S.R. KRYMSKAIA ASTROFIZICHESKAIA OBSERVATORIIA. IZVESTIIA <u>22</u> , 234-256 (1960) (O.T.P. 1).	COMM.
ROUNTREE, J. C.	ANN. ASTROPHYS. <u>23</u> , 633-654 (1960) (TRANSL.).	COMM.
HOUZIAUX, L. & SADOINE, M. P.	BULL. SOC. ROY. SCI. LIEGE <u>30</u> , 287-299 (1961).	CA
TATUM, J. B.	MONTHLY NOTICES ROY. ASTRON. SOC. <u>122</u> , 311-324 (1961).	EMISS., REL.
ALLER, L. H.	UNIV. OF MICHIGAN, DEPT. OF ASTRONOMY TECHNICAL NOTE #3 (1962).	MISC.
WOBIG, K. H.	Z. ASTROPHYSIK <u>55</u> , 100-109 (1962).	EMISS.

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TL (THALLIUM)*

TL I

KUHN, W.	NATURWISSENSCHAFTEN <u>13</u> , 724-726 (1925).	MISC.
KUHN, W.	KGL. DANSKE VIDENSKAB. SELSKAB MAT.-FYS. MEDD. <u>2</u> , 1-86 (1926).	MISC.
PROKOF'EV, V. K. & SOLOV'EV, V. N.	Z. PHYSIK <u>48</u> , 276-285 (1928).	HOOK, REL.
FILIPPOV, A. N. & PROKOF'EV, N. K.	Z. PHYSIK <u>85</u> , 647-660 (1933).	HOOK
PROKOF'EV, V. K. & FILIPPOV, A. N.	ZHUR. EKSPTL. I TEORET. FIZ. <u>4</u> , 31-42 (1933) (O.T.P. 1).	HOOK, REL.
MÜLLER, F.	HELV. PHYS. ACTA <u>2</u> , 488-491 (1934).	ABSORPT.
MÜLLER, F.	HELV. PHYS. ACTA <u>2</u> , 813-840 (1934).	ABSORPT.
MÜLLER, F.	HELV. PHYS. ACTA <u>8</u> , 152-164 (1935).	ABSORPT.
KVATER, G. S.	ZHUR. EKSPTL. I TEORET. FIZ. <u>5</u> , 426-439 (1935) (O.T.P. 1).	HOOK, REL.
KVATER, G. S.	PHYSIK. Z. SOWJETUNION <u>2</u> , 226 (1935).	HOOK, REL.
KVATER, G. S.	ZHUR. EKSPTL. I TEORET. FIZ. <u>11</u> , 421-439 (1941).	HOOK
KVATER, G. S.	ZHUR. EKSPTL. I TEORET. FIZ. <u>11</u> , 440-447 (1941).	COMM.
KVATER, G. S.	J. PHYS. U.S.S.R. <u>6</u> , 145-162 (1942).	HOOK
KVATER, G. S.	J. PHYS. U.S.S.R. <u>6</u> , 210-217 (1942).	COMM.
KVATER, G. S.	VESTNIK Leningrad Univ. SER. FIZ. I KHIM. No. 2, 135-141 (1947) (O.T.P. 1).	HOOK
STEPHENSON, G.	NATURE <u>167</u> , 112 (1951).	MISC.
STEPHENSON, G.	PROC. PHYS. SOC. LONDON A <u>64</u> , 458-464 (1951).	MISC.
MARR, G. U.	PROC. ROY. SOC. LONDON A <u>224</u> , 83-90 (1954).	ABSORPT.

*SEE ALSO TABLE 1.

NIKONOVA, E. I. & PROKOF'EV, V. K.	OPTIKA I SPEKTROSKOPIYA <u>1</u> , 290-297 (1956) (TRANSL.).	HOOK, REL.
HINNOV, E. & KOHN, H.	J. OPT. SOC. AM. <u>42</u> , 156-162 (1957).	EMISS.
GURVICH, L. V.	OPTIKA I SPEKTROSKOPIYA <u>5</u> , 205-207 (1958) (O.T.P. 1).	COMM.
VAINSHTEIN, L. A.	BULL. ACAD. SCI. U.S.S.R. PHYS. SER. <u>22</u> , 668-669 (1958).	SCF & COMM.
BREHM, B., DEMTRÖDER, W. & OSBERGHAUS, O.	Z. NATURFORSCH. <u>16A</u> , 843 (1961).	LIFE
DEMTRÖDER, W.	THESIS BONN (1961).	LIFE
HANUS, W.	BULL. ACAD. POLON. SCI. CLASSE 3, <u>8</u> , 629-636 (1961).	QUANT.
TOLANS, E. L. & LURIO, A.	BULL. AM. PHYS. SOC. (2) <u>6</u> , 75 (1961).	MISC.
DEMTRÖDER, W.	Z. PHYSIK <u>166</u> , 42-55 (1962).	LIFE
KOROLEV, F. A. & ODINTSOV, A. I.	FIZ. PROBL. SPEKTROSKOPII, AKAD. NAUK S.S.S.R., MATERIALY 13-Go (TRINADTSATAGO) SOVESHCH., LENINGRAD P. 67-69 (1962).	INCOMPL.
PENKIN, N. P. & SHABANOVA, L. N.	OPTICS AND SPECTROSCOPY (U.S.S.R.) <u>14</u> , 87-88 (1963).	HOOK
GALLAGHER, A. & LURIO, A.	PHYS. REV. <u>136</u> , A87-A105 (1964).	MISC.
SERIES, G. W. & GOUGH, W.	ACTA PHYS. POLON. <u>26</u> , 345-351 (1964).	MISC.
GOUGH, W. & SERIES, G. W.	PROC. PHYS. SOC. LONDON A <u>85</u> , 469-479 (1965).	MISC.
LAWRENCE, G. M., LINK, J. K. & KING, R. B.	ASTROPHYS. J. <u>141</u> , 293-307 (1965).	ABSORPT.
PENKIN, N. P. & SHABANOVA, L. N.	OPTICS AND SPECTROSCOPY (U.S.S.R.) <u>18</u> , 535-537 (1965).	COMM.

TL II

KNOX, R. S. & DEXTER, D. L.	PHYS. REV. <u>104</u> , 1245-1252 (1956).	ESTIM., REL.
HELLIWELL, T. M.	THESIS CALIFORNIA INSTITUTE OF TECHNOLOGY (1963).	QUANT.
HELLIWELL, T. M.	PHYS. REV. <u>135</u> , A325-A331 (1964).	QUANT.

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V (VANADIUM)*

V I

FRERICHS, R.	ANN. PHYSIK <u>81</u> , 807-845 (1926).	EMISS., REL.
KING, R. B.	ASTROPHYS. J. <u>105</u> , 376-389 (1947).	ABSORPT., REL.

*SEE ALSO TABLE 1.

RIGHINI, G.	MEM. SOC. ASTRON. ITAL. <u>19-20</u> , 303-311 (ED ALLEN, C. W., UNIVERSITY PRESS, PRINCETON, 1948-1949) (TRANSL.).	MISC., REL.
OSTROVSKII, YU. I. & PENKIN, N. P.	OPTIKA I SPEKTROSKOPIYA <u>5</u> , 345-353 (1958) (O.T.P.1).	HOOK, REL.
AOOINK, N. W. H.	SPECTROCHIM. ACTA <u>15</u> , 349-359 (1959).	EMISS.
ALLEN, C. W.	MONTHLY NOTICES ROY. ASTRON. SOC. <u>121</u> , 299-332 (1960).	COMM. & CA
BOYARCHUK, M. E. & BOYARCHUK, A. A.	AKAOEMIYA NAUK S.S.S.R. KRYMSKAIA ASTROFIZICHESKAIA OBSERVATORIYA. IZVESTIYA <u>22</u> , 234-256 (1960) (O.T.P. 1).	COMM.
MOROZOVA, N. P. & STARTSEV, G. P.	OPTICS AND SPECTROSCOPY (U.S.S.R.) <u>12</u> , 174-176 (1964).	EMISS.
STEWART, J. C. & ROTENBERG, M.	PHYS. REV. <u>140</u> , 1508A-1519A (1965).	QUANT.

V II

WILSON, O. C.	ASTROPHYS. J. <u>107</u> , 126-150 (1948).	MISC., REL.
ALLER, L. H., HAZEN, M., DOHERTY, L., GRANT, G., JUGAKU, J., SPIEGEL, E. & WADDELL, J.	PUBLICATIONS OF THE OBSERVATORY, UNIV. OF MICHIGAN (FEB. 19, 1954).	MISC., REL.
BOYARCHUK, M. E. & BOYARCHUK, A. A.	AKAOEMIYA NAUK S.S.S.R. KRYMSKAIA ASTROFIZICHESKAIA OBSERVATORIYA. IZVESTIYA <u>22</u> , 234-256 (1960) (O.T.P. 1).	COMM.
GROTH, H. G.	Z. ASTROPHYS. <u>51</u> , 231-285 (1961).	MISC.

V III

ZHVIRONAITE, S. A., KONSTANTINAVICHUS, K. V., & RAKAUSKAS, R. I.	LITOVSKII FIZICHESKII SBORNIK <u>2</u> , 17-31 (1962).	SCF
MENDLOWITZ, N.	ASTROPHYS. J. <u>138</u> , 1277-1296 (1963).	QUANT., REL.

V XIII

STEWART, J. C. & ROTENBERG, M.	PHYS. REV. <u>140</u> , 1508A-1519A (1965).	QUANT.
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Xe (XENON)*

Xe I

PETERSEN, R.	PHYS. & CHEM. SOLIDS <u>1</u> , 284 (1957).	QUANT., REL.
STATZ, H., TANG, C. L. & KOSTER, G. F.	J. APPL. PHYS. <u>34</u> , 2625-2632 (1963).	QUANT., REL.
TANG, C. L.	PROCEEDINGS OF THE IEEE <u>51</u> , 219 (1963).	QUANT., REL.
FAUST, W. L. & MCFARLANE, R. A.	J. APPL. PHYS. <u>35</u> , 2010-2015 (1964).	QUANT., REL.
ANDERSON, D. K.	PHYS. REV. <u>132</u> , A21-A26 (1965).	MISC.
MALAKHOV, V. P.	IZVESTIIA UYSSHIKH UCHEBNYKH ZAVEDENII FIZIKA <u>8</u> , 180 (1965).	INCOMPL.

Xe II

EDLÉN, B.	PHYS. REV. <u>65</u> , 248 (1944).	QUANT. FORB.
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Xe III

EDLÉN, B.	PHYS. REV. <u>65</u> , 248 (1944).	QUANT. FORB.
OSTERBROCK, D. E.	ASTROPHYS. J. <u>114</u> , 469-472 (1951).	QUANT. FORB.

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Y (YTTRIUM)*

Y I

GOLDBERG, L., MÜLLER, E. A. & ALLER, L. H.	ASTROPHYS. J. SUPPL. SER. <u>5</u> , #45, 1-137 (1960).	CA
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Y II

BOYARCHUK, M. E. & BOYARCHUK, A. A.	AKADEMIIA NAUK S.S.S.R. KRYMSKAIA ASTROFIZICHESKAIA OBSERVATORIIA. IZVESTIIA <u>22</u> , 234-256 (1960) (O.T.P. 1).	COMM., REL.
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*SEE ALSO TABLE 1.

ZN (ZINC)*

ZN I

PROKOF'EV, V. K.	Z. PHYSIK <u>50</u> , 701-715 (1928).	ESTIM.
LARCHE, K.	Z. PHYSIK <u>62</u> , 440-477 (1931).	MISC., REL.
PROKOF'EV, V. K.	ZHUR. EKSPTL. I TEORET. FIZ. <u>1</u> , 111-122 (1931) (O.T.P. 1).	ESTIM.
FILIPPOV, A. N.	PHYSIK. Z. SOWJETUNION <u>1</u> , 289-296 (1932).	HOOK, REL.
FILIPPOV, A. N.	TRUOY GOSUOARST. OPT. INST. LENINGRAO <u>8</u> , #77, 1-8 (1932) (O.T.P. 1).	HOOK, REL.
SOLEILLET, P.	COMPT. RENO. <u>195</u> , 372-373 (1932) (TRANSL.).	MISC.
RUSSELL, H. N.	ASTROPHYS. J. <u>78</u> , 239-297 (1933).	ESTIM.
BILLETER, W.	HELV. PHYS. ACTA <u>2</u> , 505-513 (1934).	ABSORPT.
BILLETER, W.	HELV. PHYS. ACTA <u>2</u> , 841-842 (1934).	COMM.
SOLEILLET, P.	COMPT. RENO. <u>204</u> , 253-255 (1937).	ABSORPT.
AUSLÄNDER, J.	HELV. PHYS. ACTA <u>11</u> , 562-586 (1938).	ABSORPT.
MASON, R. C.	PHYSICA <u>5</u> , 777-783 (1938).	EMISS., REL.
BRUCK, H.	COMPT. RENO. <u>208</u> , 1805-1807 (1939) (TRANSL.).	MISC.
KING, G. W. & VAN VLECK, J. H.	PHYS. REV. <u>56</u> , 464-465 (1939).	QUANT. FORB., REL.
BRUCK, H.	THESIS PARIS (1942) (TRANSL.).	MISC.
BRUCK, H.	COMPT. RENO. <u>214</u> , 307-309 (1942) (TRANSL.).	MISC.
SCHUTTEVAER, J. W.	THESIS UTRECHT (1942).	EMISS., REL.
SCHUTTEVAER, J. W. & SMIT, J. A.	PHYSICA <u>10</u> , 502-512 (1943).	EMISS., REL.
SCHUTTEVAER, J. W., OE BONT, M. J. & VAN OEN BROEK, TH. H.	PHYSICA <u>10</u> , 544-552 (1943).	EMISS., REL.
SPITZER, M.	COMPT. RENO. <u>232</u> , 696-698 (1954) (TRANSL.).	MISC.
GENEUX, E. & WANDERS-VINCENZ, B.	HELV. PHYS. ACTA <u>33</u> , 185-220 (1960) (TRANSL.).	MISC.
MAY, A. D.	COMPT. RENO. <u>250</u> , 3616-3617 (1960) (TRANSL.).	MISC.
MAY, A. D.	COMPT. RENO. <u>251</u> , 1371-1372 (1960) (TRANSL.).	MISC.
PENKIN, N. P. & REO'KO, T. P.	OPTICS AND SPECTROSCOPY (U.S.S.R.) <u>2</u> , 360 (1960).	HOOK, REL. & EMISS., REL.
LEŚ, Z. & NIEWOONICZAŃSKI, H.	ACTA PHYS. POLON. <u>20</u> , 701-714 (1961).	EMISS., REL.
GARSTANG, R. H.	J. OPT. SOC. AM. <u>52</u> , 845-851 (1962).	QUANT.
VAINSHTAIN, L. A. & POLUEKTOV, I. A.	OPTICS AND SPECTROSCOPY (U.S.S.R.) <u>12</u> , 254-257 (1962).	QUANT., REL.
HELLIWELL, T. M.	THESIS CALIFORNIA INSTITUTE OF TECHNOLOGY (1963).	QUANT.

*SEE ALSO TABLE 1.

AUTHOR	JOURNAL	CLASSIFICATION
KORNALEWSKI, T. & NIEWODNICZAŃSKI, H.	ACTA PHYS. POLON. <u>24</u> , 601-609 (1963).	EMISS. REL.
HELLIWELL, T. M.	PHYS. REV. <u>135</u> , A325-A331 (1964).	QUANT.
LURIO, A., DE ZAFRA, R. L. & GOSHEN, R. J.	PHYS. REV. <u>134</u> , A1198-A1203 (1964).	MISC.

Zn II

RUSSELL, H. N.	ASTROPHYS. J. <u>78</u> , 239-297 (1933).	ESTIM.
BRUCK, H.	COMPT. REND. <u>208</u> , 1805-1807 (1939) (TRANSL.).	MISC.
GENEUX, E. & WANDERS-VINCENZ, B.	PHYS. REV. LETTERS <u>3</u> , 422-423 (1959).	MISC.
GENEUX, E. & WANDERS-VINCENZ, B.	HELV. PHYS. ACTA <u>33</u> , 185-220 (1960) (TRANSL.).	MISC.

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Zr (ZIRCONIUM)*

Zr I

GOLDBERG, L., MÜLLER, E. A. & ALLER, L. H.	ASTROPHYS. J. SUPPL. SER. <u>5</u> , #45, 1-137 (1960).	CA
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Zr II

BOYARCHUK, M. E. & BOYARCHUK, A. A.	AKADEMIIA NAUK S.S.S.R. KRYMSKAIA ASTROFIZICHESKAIA OBSERVATORIIA. IZVESTIIA <u>22</u> , 234-256 (1960) (O.T.P. 1).	COMM., REL.
HOUIAUX, L. & SADOINE, M. P.	BULL. SOC. ROY. SCI. LIÉGE <u>30</u> , 287-299 (1961).	CA

*SEE ALSO TABLE 1.

4. PARTIAL LIST OF ABBREVIATIONS

FOR CONVENIENCE COMPLETE TITLES FOR THE ABBREVIATIONS OF SPARSELY CIRCULATED JOURNALS AND ADDRESSES FOR TRANSLATING SERVICES ARE LISTED.

AEC-TR

ARCH. NÉERL. SCI. 3A

ASTIA DOCUMENT (AD)

ATS (TRANSL.)

BULL. ACAD. POLON. SCI. CLASSE 3

BULL. SOC. ROY. SCI. LIÉGÉ

MEM. SOC. ASTRON. ITAL.

MÉM. SOC. ROY. SCI. LIÉGÉ

MÜNCH. TIERÄRZTL. WOCHSCHR.

O.T.P. 1

O.T.P. 2

SLA-RT

ATOMIC ENERGY COMMISSION ENGLISH TRANSLATION

ARCHIVES NÉERLANDAISES DES SCIENCES EXACTES ET
NATURELLES. SERIES 3A

ARMED SERVICES TECHNICAL INFORMATION AGENCY DOCUMENT
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BULLETIN DE L'ACADÉMIE POLONAISE DES SCIENCES.

CLASSE 3

BULLETIN DE LA SOCIÉTÉ ROYALE DES SCIENCES DE LIÉGÉ

MEMORIE DELLA SOCIETÀ ASTRONOMICA ITALIANA

MÉMOIRES DE LA SOCIÉTÉ ROYALE DES SCIENCES DE LIÉGÉ

MÜNCHENER TIERÄRZTLICHE WOCHENSCHRIFT

1. "OPTICAL TRANSITION PROBABILITIES" 1924-1960

(NATIONAL SCIENCE FOUNDATION, WASHINGTON, D. C.,
AND DEPARTMENT OF COMMERCE BY THE ISRAEL PROGRAM
FOR SCIENTIFIC TRANSLATIONS, JERUSALEM, 1962).

2. "OPTICAL TRANSITION PROBABILITIES" 1932-1962

(NATIONAL SCIENCE FOUNDATION, WASHINGTON, D. C.,
AND DEPARTMENT OF COMMERCE BY THE ISRAEL PROGRAM
FOR SCIENTIFIC TRANSLATIONS, JERUSALEM, 1963).

ENGLISH TRANSLATION AVAILABLE FROM:

SLA TRANSLATION MONTHLY, THE JOHN CRERAR LIBRARY,
35 WEST 33RD STREET, CHICAGO 16, ILLINOIS

Selected Publications of the National Bureau of Standards

Atomic Energy Levels, C. E. Moore:

Circular 467, Volume I.	H to V ($Z=1$ to 23) 206 spectra. 309 p. (1949).	\$5.50
Circular 467, Volume II.	Cr to Nb ($Z=24$ to 41) 152 spectra. 227 p. (1952).	\$4.00
Circular 467, Volume III.	$\left\{ \begin{array}{l} \text{Mo to La } (Z=42 \text{ to } 57) \\ \text{Hf to Ac } (Z=72 \text{ to } 89) \end{array} \right\}$ 124 spectra. 245 p. (1958).	\$3.00

An Ultraviolet Multiplet Table, C. E. Moore:

Circular 488, Section 1.	H to V ($Z=1$ to 23); Selected Multiplets of 79 Spectra. 78 p. (1950). Combined with section 2.	
Circular 488, Section 2.	Cr to Nb ($Z=24$ to 41); Selected Multiplets of 46 Spectra. 115 p. (1952).	\$1.25
Circular 488, Section 3.	$\left\{ \begin{array}{l} \text{Mo to La } (Z=42 \text{ to } 57) \\ \text{Hf to Ra } (Z=72 \text{ to } 88) \end{array} \right\}$ Selected Multiplets of 78 Spectra. 94 p. (1961).	\$0.60
Circular 488, Section 4.	H to Nb ($Z=1$ to 41); Finding List for Sections 1 and 2 of the Table. 65 p. (1961).	\$0.45
Circular 488, Section 5.	$\left\{ \begin{array}{l} \text{Mo to La } (Z=42 \text{ to } 57) \\ \text{Hf to Ra } (Z=72 \text{ to } 88) \end{array} \right\}$ Finding List for Section 3 of the Table. 30 p. (1961).	\$0.30

Table of Wavenumbers, C. D. Coleman, W. R. Bozman, and W. F. Meggers:

Monograph 3, Volume I.	2000A to 7000A. 508 p. (1960).	\$6.00
Monograph 3, Volume II.	7000A to 1000 μ . 542 p. (1960).	\$6.00

New Description of Thorium Spectra, Romuald Zalubas:

Monograph 17,	106 p. (1960).	\$0.65
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Tables of Spectral-Line Intensities, W. F. Meggers, C. H. Corliss, and B. F. Scribner:

Monograph 32, Part I.	Arranged by Elements. 474 p. (1961).	\$4.00
Monograph 32, Part II.	Arranged by Wavelengths. 272 p. (1961).	\$3.00

Selected Tables of Atomic Spectra, C. E. Moore:

Atomic Energy Levels and Multiplet Tables—Si II, Si III, Si IV.		
National Standard Reference Data Series—National Bureau of Standards 3—Section 1. 32 p. (1965).		
		\$0.35

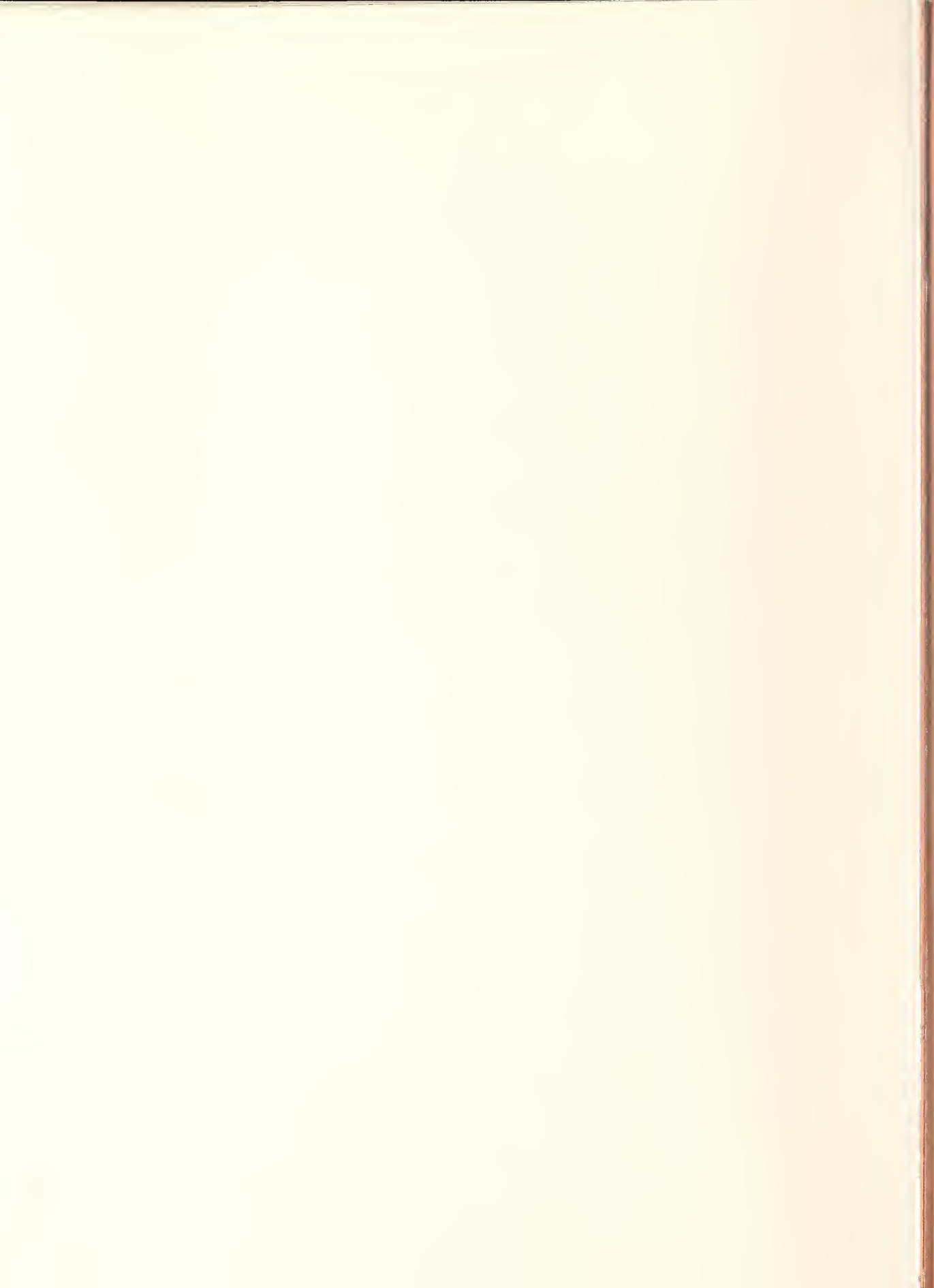
The above publications may be purchased from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C., 20402.

A Multiplet Table of Astrophysical Interest, C. E. Moore. A Reprinting of the 1945 Multiplet Table (Princeton Univ., Obs. Contr. No. 20):

Technical Note 36 (PB151395), Part I	Table of Multiplets, and Part II Finding List, $\lambda\lambda 2951\text{\AA}$ –13164 $\text{\AA}$. 242 p. (1959).	\$4.00
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The above Technical Note may be purchased by the PB number from the Clearinghouse for Federal Scientific and Technical Information, 5285 Port Royal Road, Springfield, Va., 22151.







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